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Document Number 14

Entry 14 of 31

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Oct 8, 1993

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 TITLE: CUSTOMER MASTER UPDATING SYSTEM

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NAME

COUNTRY

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INT-CL (IPC): G06F 15/21

ABSTRACT:

PURPOSE: To utilize new information with priority by adding each of information read out from a customer master to the family information of information read out from a new registering customer file without overlapping it.

CONSTITUTION: Customer information, read out from a new customer file F1 storing new registering customer information is stored in a work area of a processing part P1. Applicant information and the family information of the same households as the applicant are stored. Then registered customer information read out from a customer master F2 is stored in the work area. All of the customer information of a work area W1 are transferred to a work area W3. Each of customer information stored in a work area W2 is collated with all of the customer information stored in the work area W3 to check identity. Only when the customer information is not identical with the contents of the work area W3, the customer information is added as the family information of the work area W3. Then the customer information stored in the work area W3 is written in the master F2. Consequently the registered information is stored following the new information.

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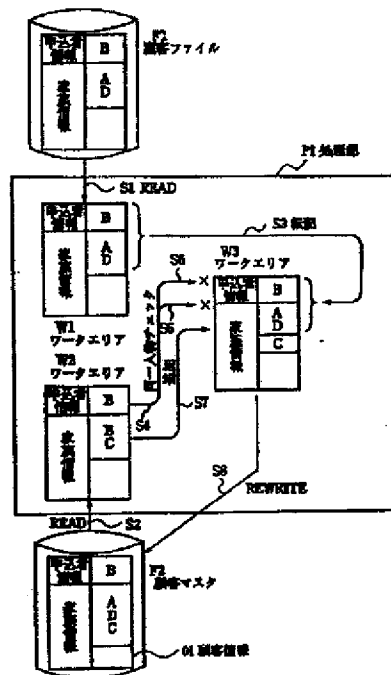
(54) 【発明の名称】 顧客マスタ更新方式

(57) 【要約】

【目的】 登録用新顧客ファイル上の申込者を顧客マスタの申込者として登録する場合に於いて、顧客マスタ中の新情報を優先して活用することを目的とする。

【構成】 登録用新顧客ファイルF1からREADした内容をワークエリアW3へ転記し、そこへ顧客マスタF2からREADした情報1個人づつ追加し、ワークエリアW3の内容で顧客マスタF2を更新する。

【効果】 プログラムに於いて処理の負担が軽減されるだけでなく、顧客マスタの情報の中で、新しく登録された顧客に対して優先的にダイレクトメールを送送することができる。



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【特許請求の範囲】

【請求項1】 ダイレクトメール発行用の顧客マスタに関して登録用の新規の顧客情報と、既登録の顧客情報とが同一世帯である場合登録用の新規の顧客情報を基にして既登録の顧客情報を更新することを特徴とする顧客マスタ更新方式。

【請求項2】 既登録の第1の申込者情報と第1の家族情報とからなる第1の顧客情報を格納する顧客マスタと、新規の第2の申込者情報と第2の家族情報とからなる第2の顧客情報を格納する顧客ファイルと、前記第1の顧客情報を読み取って格納し前記第1の顧客情報のうち前記第2の顧客情報に含まれない第1の申込者情報および第1の家族情報を前記第2の顧客情報のうちの第2の家族情報に付加して台3の家族情報とし前記第2の申込者情報と前記第3の家族情報とからなる第3の顧客情報を前記顧客マスタに格納せしめる処理部を含むことを特徴とする顧客マスタ更新方式。

【請求項3】 新規の第1の申込者情報と第1の家族情報とからなる第1の顧客情報を読み取って格納し、既登録の第2の申込者情報と第2の家族情報とからなる第2の顧客情報とを読み取って格納し、前記第1の顧客情報と前記第2の顧客情報とを相互に比較し、一致していない第2の顧客情報を前記第1の顧客情報のうちの家族情報に付加して第3の家族情報とし、前記第1の申込者情報と前記第3の家族情報とからなる第3の顧客情報として更新することを特徴とする顧客マスタ更新方式。

【発明の詳細な説明】

【0001】

【産業上の利用分野】 本発明は、顧客マスタ更新方式、特に、ダイレクトメール発送用の顧客マスタについて一世帯情報を管理情報として扱う顧客マスタ更新方式。

【0002】

【従来の技術】 従来の顧客マスタ更新方式は新規の申込者情報について既登録か否かのチェックを行い既登録ならば削除した後に、新規の家族情報と既登録の申込者情報および家族情報からなる顧客情報を家族情報として格納し、ソートを行ったのち同一家族情報の存否チェックを行ってあれば削除したのちに顧客マスタに登録するものであった。

【0003】 次に、従来例について図面を参照して説明する。

【0004】 図2に示す顧客マスタ更新方式は、登録用の新規の顧客情報を格納して顧客ファイルF1中の申込者情報を顧客マスタF2の申込者情報として登録する場合に顧客ファイルF1から動作ステップS1でREADして格納した処理部P2の中のワークエリアW1中の顧客情報と同一世帯の顧客情報が動作ステップS2で顧客マスタF3よりREADして格納されたワークエリアW2に存在するか否かの申込者情報の存否チェックを行う。

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【0005】 すなわち、まず、動作ステップS9で新申込者設定のためワークエリアW4に申込者情報としてワークエリアW1の申込者情報を設定する。

【0006】 次に、動作ステップS10でワークエリアW1の申込者情報がワークエリアW2に存在するか否かをチェックし、存在する場合はワークエリアW2の同一人物データを削除する。

【0007】 動作ステップS11では、ワークエリアW1中の家族情報をワークエリアW4の家族情報として転記する。

【0008】 動作ステップS12では、ワークエリアW2中の削除された人物以外の申込者情報と家族情報とをワークエリアW4の家族情報として追加する。

【0009】 動作ステップS13では、ワークエリアW4の家族情報をソートして、ソート後の家族情報を申込者情報とともにワークエリアW5に格納する。

【0010】 動作ステップS14ではワークエリアW5の家族情報の名よせを行い、名よせ後の顧客情報をワークエリアW6に格納する。

【0011】 最後に、動作ステップS15でワークエリアW6の顧客情報を顧客マスタF3へREWRITEする。

【0012】

【発明が解決しようとする課題】 しかしながら、このような上述した従来の顧客マスタ更新方式は、更新後の家族情報が情報の新・旧に関わらず、ソートのキーの順番に並び、新しい情報を優先して活用することができないばかりでなく、更新処理に時間がかかるという欠点があった。

【0013】

【課題を解決するための手段】 本発明の顧客マスタ更新方式は、登録用の新規の顧客ファイルからREADした情報の家族情報へ顧客マスタからREADした情報を1個人づつ重複せずに追加する手段を有して構成される。

【0014】

【実施例】 次に、本発明の実施例について図面を参照して説明する。

【0015】 図1は本発明の一実施例を示すシステム構成図である。

【0016】 図1に示す顧客マスタ更新方式は、動作ステップS1で登録用の新規の顧客情報を格納した新顧客ファイルF1からREADした顧客情報を処理部P1のワークエリアに格納するもので、申込者情報と同一世帯の家族情報とが格納され動作ステップS2で顧客マスタF2よりREADした既登録の顧客情報がワークエリアに格納される。

【0017】 動作ステップS3ではワークエリアW1の顧客情報を全てワークエリアW3へ転記する。

【0018】 動作ステップS4ではワークエリアW2に格納されている顧客情報を1人ずつワークエリアW3に

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格納されている申込者情報および家族情報からなる顧客情報の全員に対して総あたりに同一人物チェックを行い、同一人物の場合は動作ステップS5、S6でワークエリアW3への家族情報としての追加を行わないが、同一人物でない場合は動作ステップS7でワークエリアW3の家族情報として追加を行う。全員についての処理が終ったか否かの終了チェックを行い、終了していない場合は動作ステップS4～S7の処理をくりかえすが終了した場合は動作ステップS8でワークエリアW3に格納されている顧客情報を顧客マスF2へREWRITE 10する。

【0019】これにより登録用新顧客情報に基づき顧客マスタを更新することができ、既登録の顧客情報は新規の顧客情報の少なくとも後に格納されることとなる。

【0020】

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【発明の効果】本発明の顧客マスタ更新方式は、新規申込者情報の既登録チェックと同一家族情報の存否チェックを行う代りに新旧の顧客情報について同一人物の存否チェックを行うことにより、処理段階を削減できるので、更新時間を短縮できるという効果がある。

【図面の簡単な説明】

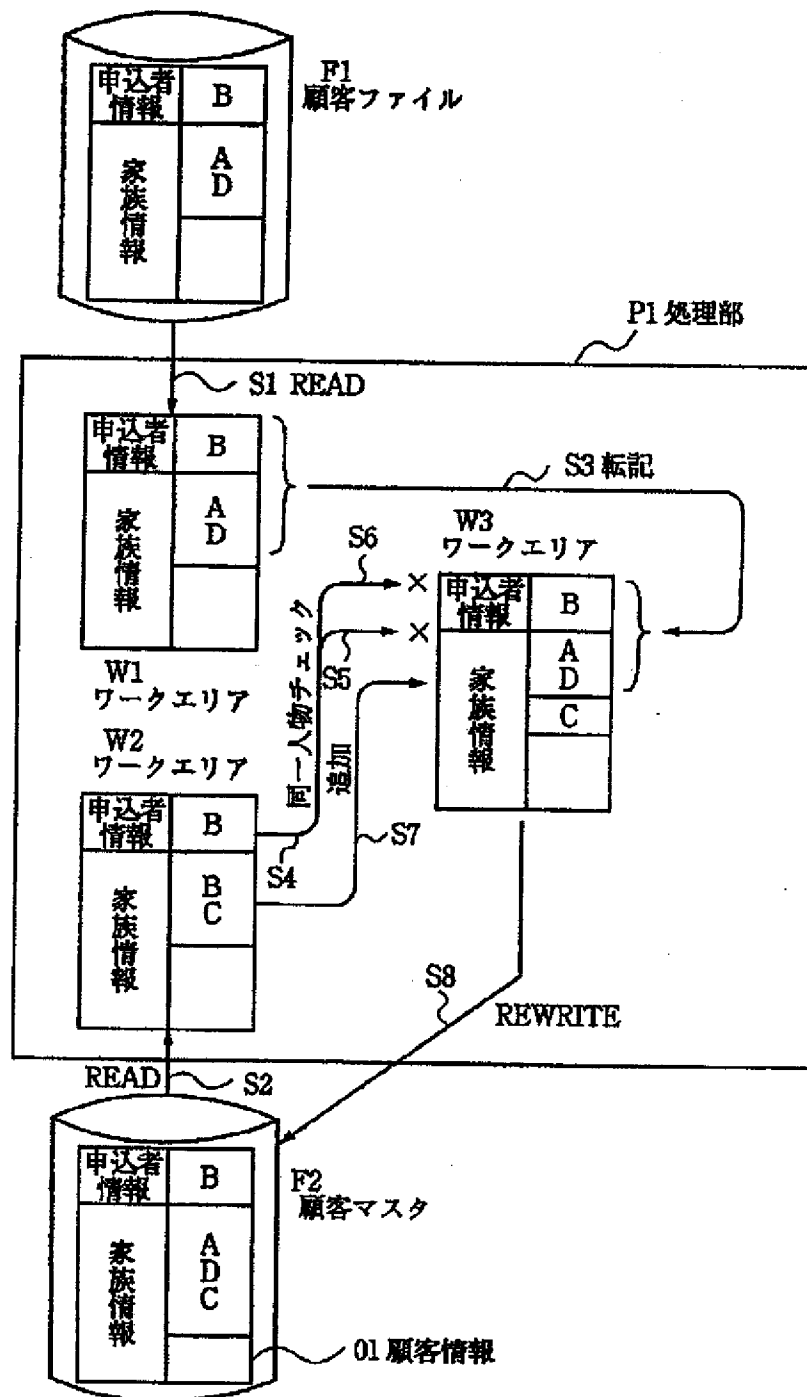
【図1】本発明の一実施例を示すシステム構成図。

【図2】従来の一例を示すシステム構成図。

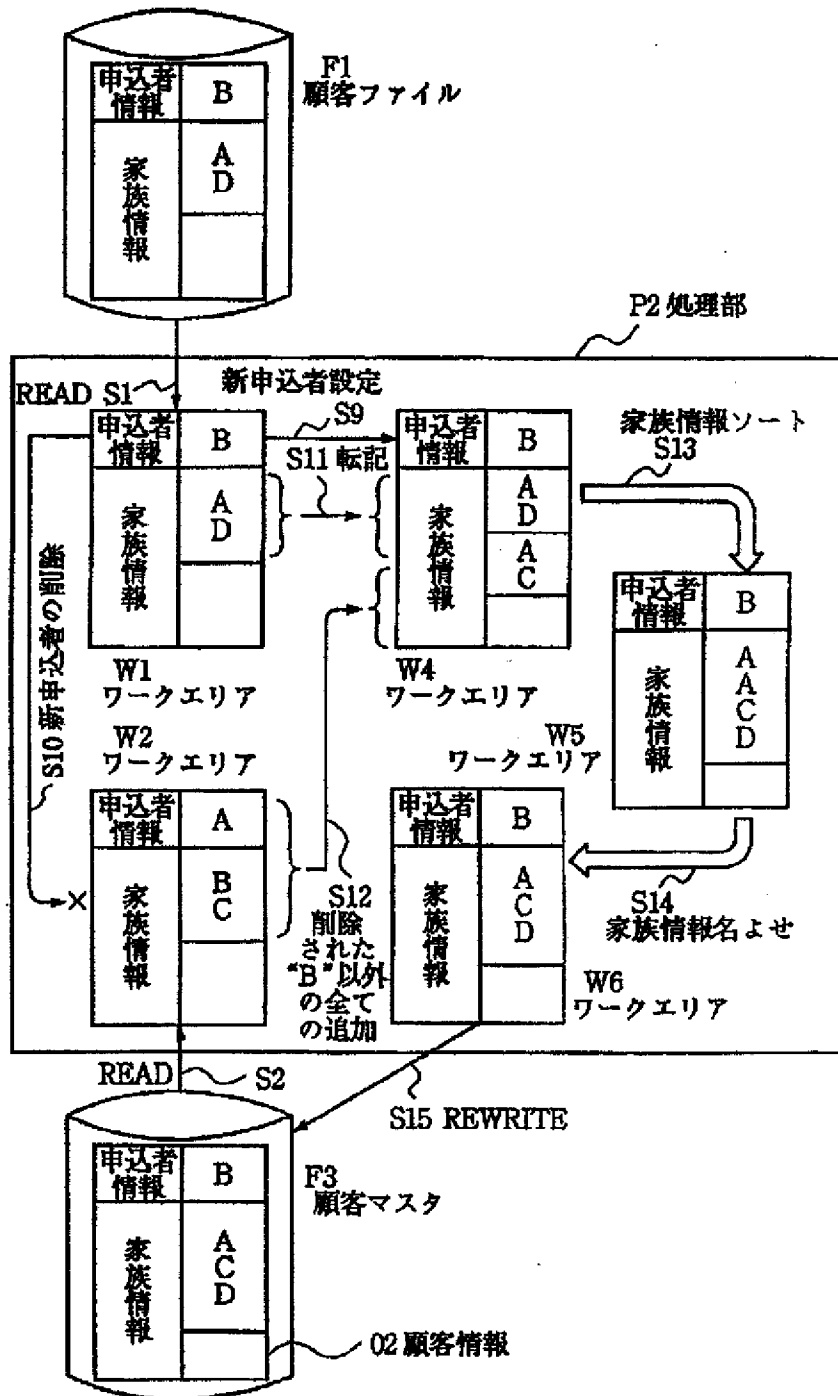
【符号の説明】

P1, P2 処理部
F1 顧客ファイル
F2, F3 顧客マスタ
W1～W6 ワークエリア
D1, D2 顧客情報
S1～S5 動作ステップ

【図1】



【図2】

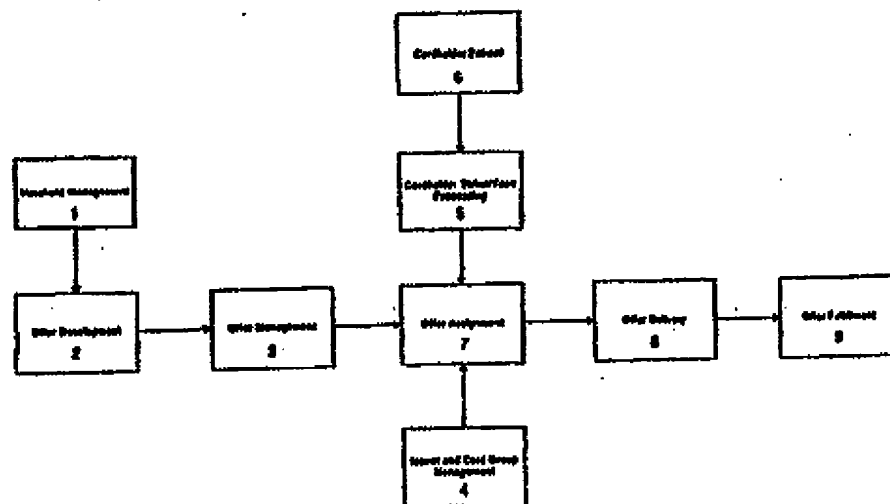


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(54) Title: SYSTEM AND METHOD FOR A TARGETED PAYMENT SYSTEM DISCOUNT PROGRAM

High Level Overview



(57) Abstract

A system and method for operating a computer based targeted payment system discount program. Consumer information from consumer payment system institutions is used to match qualified consumers to targeted merchant discount offers. Offers are automatically prioritized based on their expected value to consumers and consumers receive the highest priority offers for which they qualify. The default prioritization can be altered or overridden by the consumer's payment systems institution. Discounts are automatically applied during the processing of the qualifying purchase without the need for coupons or additional actions by either the merchant or consumer.

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**SYSTEM AND METHOD FOR A
TARGETED PAYMENT SYSTEM DISCOUNT PROGRAM**

BACKGROUND OF THE INVENTION

As the credit card industry has evolved and grown more competitive over the
5 last twenty years, many credit card issuing financial institutions have attempted to
distinguish themselves from their competition by introducing new features and
benefits with their credit cards. Among these features have been programs that
reward the consumer for using their credit card with reduced interest rates on the
purchase amount, accrued rebates redeemable for specified products or services, or
10 coupons redeemable at the time of purchase. Some of the more successful reward
programs have been designed to motivate the consumer to make purchases at specific
merchants.

It is common practice among the credit card issuers to include inserts with
their monthly statements that market merchant products and services. The targeting
15 for these inserts is based, however, on minimal cardholder information such as the
cardholder's state, zip code, or credit card type. These sorts of inserts have been
found to generate a very low response rate, i.e., have stirred little interest in
consumers. It is believed that most cardholders discard the inserts without looking at
them.

20 Focus groups conducted on this subject have found that consumers are
interested in receiving discounts for products and services, but only for those items
that they consider valuable. It is impossible to evaluate consumer interest in a product
or service based only on the geographic location of the consumer's residence.

25 Merchants are continually looking for ways to effectively market their
products and services. Discounts have proven to be an effective method for attracting
and retaining customers. Today there are a number of vehicles available to the
merchant to provide discounts to potential customers including bulk mailings,
newspaper, radio and television advertisements, and targeted marketing.

Targeted marketing is particularly effective and efficient for merchants because it is designed to identify consumers that are more likely than the general public to be interested in the merchant's products or services. One proven method has been to identify consumers that have demonstrated interest by purchasing similar or related products in the past. One way for merchants to obtain such information has been to purchase consumer lists from various providers. These lists are again, however, generally based on rather limited, static targeting criteria.

Merchants thus desire a flexible, cost effective method for finding consumers who will be interested in their products or services. Consumers on the other hand desire discounts on products and services they want or need. Unfortunately, the structure of the bank card world (Visa and MasterCard) makes the accomplishment of these seemingly parallel goals difficult. Cardholder transaction histories, a key to determining cardholder preferences and thus successful target marketing, are owned and controlled by the cardholders' issuing financial institutions and are unavailable to merchants and their acquiring financial institutions who are separated from the cardholders and their issuers by the Visa and MasterCard interchanges, across which money, but not information, passes.

Merchants and their acquirers do not therefore have access to the cardholder information necessary to provide targeted offers, and issuers do not have the access to merchants necessary to design targeted offers deemed valuable by their cardholders. An individual financial institution that serves as both an issuer and acquirer may bridge the gap for its own merchants and cardholders, but targeting to this smaller subset of cardholder is obviously of less value to merchants and the limited range of merchant offers is similarly of less value to cardholders and will be less effective in stimulating card usage. The divide between merchants and their acquirers and cardholders and their issuers can be bridged however by a credit card processor that receives information from both sides of the interchange and has the processing capacity to perform the necessary offer matching, delivery, and fulfillment.

SUMMARY OF THE INVENTION

The purpose of the present invention is to meet the objectives of merchants (which includes service providers) and consumers as well as the financial institutions on both sides of the interchange. Specifically, the goal is to provide merchants with a flexible, cost effective method to provide a large number of interested consumers with value propositions that discount the merchants products and services, and to provide consumers, or cardholders, with a broad range of merchant offers in which they will be most interested. A further goal and effect of the invention will be to increase the use of the bankcards of participating financial institutions, which provides a convenient automated means for implementing targeted discounts without the need for coupons, mailings, or additional transactions on the part of either the cardholder or merchant. Finally, the invention meets the above objectives while at the same time preserving the consumers' privacy by avoiding the dissemination of the cardholders' transaction histories to merchants or outside financial institutions.

To meet these objectives the invention utilizes five basic steps: (1) an automated process which enables the merchant to target consumers based on purchase behavior and geographic location; (2) an automated process which matches targeted merchant offers against a data base of consumers and historic purchase behavior; (3) an automated process which provides the consumer with the best value propositions from multiple merchants/service providers; (4) the ability for the consumer to act on the value proposition and receive an automated credit for the discount amount without the need of a coupon or additional transactions; (5) an automated process which reports on the execution of the discount transaction to the consumer and merchant.

In the first step, the merchant can, through an automated process, define targeting criteria based on consumer historic purchase activity by Merchant Category Code (MCC) or specific merchant ID. This gives the merchant the ability to target consumers that have transacted at their location, competitors en masse, or complimentary MCCs. For example, a boating merchant can target consumers that have made purchases at boating merchants, boating service stations, or sporting goods stores. The merchant can further focus the targeting of historic purchase activity by requiring a specific number of prior purchases and/or a minimum dollar amount spent

at the targeted merchants during a specific period. Other targeting criteria available to the merchant include airline travel information, months since last move, credit limit, credit instrument available funds, consumer state, and consumer five digit zip code. Merchants or their acquirers can submit preliminary batch queries to determine the number of cardholders who would qualify for a particular proposed discount offer. Merchants can thereby fine tune their target criteria to reach an audience of the desired size and level of interest.

Merchants can define the discount amount of the value propositions to be a percentage of the total purchase or a flat dollar amount. They can also define whether the value proposition is a one time offer or unlimited for a specified promotion period. If the value proposition can be redeemed more than once, the merchant can vary the discount percentage or amount between the first and subsequent purchases. The merchant can also define a minimum or maximum purchase amount, as well as a maximum discount amount.

Once the target criteria have been defined, an automated process matches the value propositions against the consumer data base supplied by the participating issuers to find eligible consumers. Each consumer will receive multiple value propositions from different merchants. The limit on the number of value propositions provided to each consumer each month is defined by a parameter in the automated system. If the consumer is eligible for more than that limit, the automated system will select the best value propositions. In the preferred embodiment, value propositions are prioritized based on the total transaction dollar volume that they are expected to generate, a good proxy for determining those value propositions that consumers will most likely respond to and find valuable. The formula used to calculate expected total transaction dollar volume depends on a number of features of the offer. This prioritization formula will be updated automatically as data on actual offers is received.

This prioritization of merchant offers may be altered by the cardholder's issuing financial institution. Issuing institutions may automatically or manually either exclude or preference particular offers for particular cardholders. For instance, if an issuing bank is also participating in a co-branding program with an oil company, it

may want to, or be contractually required to, exclude its co-branded cardholders from receiving discount offers from competing oil companies. Or, a bank may want to use additional demographic information on its cardholders to override or further refine the default prioritization of offers to certain or all of its cardholders in an attempt to further maximize card usage and customer satisfaction (and obtain a competitive advantage over other issuers).

Through an automated process, consumers receive notification of the value propositions available to them along with the pertinent information: discount amount, minimum or maximum purchase (if applicable), maximum discount amount (if applicable), and expiration date. The redemption of the value propositions is automatic when the consumer uses his or her credit card at the merchant/service provider's establishment. No coupon is provided or required. The purchase transaction is processed through the merchant/service provider's acquiring institution where the discount is applied. The original purchase transaction along with the discount transaction is sent to the consumer's issuing financial institution where it is processed and ^{a user?} statemented on the consumer's next statement. The purchase and the discount transaction are also provided on the merchant's next statement by its acquiring institution. After the offer period has expired, merchants automatically receive reports summarizing the response rate, i.e. success of their offers.

BRIEF DESCRIPTION OF THE DRAWINGS

- Fig. 1 is a diagram of the major process flows of the invention;
Fig. 1.1 is a diagram of the Merchant Management process;
Fig. 1.2 is a diagram of the Offer Development process;
Fig. 1.3 is a diagram of the Offer Management process;
Fig. 1.4 is a diagram of the Issuer and Card Group Management process;
Fig. 1.5 is a diagram of the Cardholder/Ticket Tape processing;
Fig. 1.6 is a diagram of the Cardholder Extract process;
Fig. 1.7 is a diagram of the Offer Assignment process;
Fig. 1.8 is a diagram of the Offer Delivery process;
Fig. 1.9 is a diagram of the Offer Fulfillment process;

Fig. 2 is a diagram of the process flow involved in checking for cardholder participation.

DETAILED DESCRIPTION

Fig. 1 shows an overview of the major process flows of the Program. Block 1 represents Merchant Management which entails the collection and maintenance of information on all participating merchant outlets required for the implementation of the Program. This information is maintained in the Merchant Data Store, a collection of files which includes the Merchant Table, Merchant Financial History Table, Merchant Category Code Table and the Merchant Qualification Criteria. Block 1 is expanded and further explained in Fig. 1.1. Block 4 represents Issuer and Card Group Management which entails the collection and maintenance of data on the issuers and their cardholders who may be subdivided by the issuer into up to 36 separate card groups. Block 4 is expanded and further explained in Fig. 1.4. Block 6 represents the process of Extracting participating cardholders from the participating issuers' Master Cardholder files. This block is expanded and further explained in Fig. 1.6. Block 5 represents Cardholder and Ticket Tape Processing, i.e., the means by which the transaction histories of participating cardholders are updated and incorporated in the Program Matching File for use in the Cardholder Offer Assignment process. Block 5 is expanded and further explained in Fig. 1.5. Block 2 represents the Offer Development process whereby merchants and their acquirers formulate and test discount offers and developed offers are entered into the official offer pool. Block 2 is expanded and further explained in Fig. 1.2. Block 3 represents the Offer Management processes which includes the review of offers by issuers, their prioritization into value tiers, and the final release of offers for use in the matching process. Block 3 is expanded and further explained in Fig. 1.3. Block 7 represents the Offer Assignment process. This includes the matching of offers with cardholders, their distribution to cardholders who qualify for more than the maximum number of offers, and the "fair share" allocation of oversubscribed offers. Block 7 is expanded and explained further in Fig. 1.7. Block 8 represents the process of automatically notifying cardholders of the best offers for which they qualify. Block 8 is expanded and explained further in Fig. 1.8. Block 9 represents the Offer Fulfillment process in which offers completed by qualifying cardholders are automatically detected and the

resulting discounts credited to the cardholders account. Block 9 is expanded and further explained in Fig. 1.9.

Fig. 1.1 details the Merchant Management process through which all of the data on all participating merchants required for implementation of the Program is collected and maintained in the Merchant Data Store. The collected data is necessary for the offer prioritization process and the issuer preference and exclusion processes which will be discussed in more detail in the context of the Offer Assignment process detailed in Fig. 1.7.

Every week in step 1.1.7 a file is created from the Merchant Master File , 1.1.8, listing all participating Merchants. The result is the Merchants File 1.1.6. The Merchants File is then pre-processed in the Merchant Load step 1.1.5, wherein each merchant record is supplemented with an Area of Dominant Influence (ADI) which is assigned based on the merchant's five digit zip code. The resulting supplemented records are stored in the Merchant Table 1.1.4.

To keep closer tabs on Merchants whose status has changed (e.g., has suffered financial problems or closed outlets) a Merchant Update File 1.1.2 is sent daily from the merchant processor. This file contains all the changes which were made to the merchant's record. This information is added to the Merchant table (1.1.4) through the Merchant Update step (1.1.3) again, new merchants will be added and existing merchants will be updated but merchants will not be deleted during this process. The daily Merchant Update is primarily to track particularly time critical information, e.g. the discovery of a fraudulent merchant.

The monthly sales and transaction information on all merchant outlets is extracted from the Merchant Financial History Master File (1.1.16) and imported to the system in the form of the Merchant Financial History File (1.1.15). Records from this file are added monthly in the Merchant Financial History Load step to the Merchant Financial History Table (1.1.13) in the Merchant Data Store. The table contains up to 13 months of financial and transaction summary information for each merchant outlet. During the Merchant Financial History Load step, the 14th month of data is deleted from the table.

Visa and MasterCard Merchant Category Code (MCC) information on participating merchants is stored in the MCC File (1.1.22) which is updated monthly

by the merchant processor. This file is used to update the records in the MCC Table (1.1.18) in the Merchant Data Store. The records in the MCC Table also contain manually entered MCC Cluster data that is maintained during the update process. New MCC's may be added during the update but old MCC records are not deleted.

- 5 To qualify for participation in the program, merchants must satisfy the Merchant Qualification Criteria contained in 1.1.10 in the Merchant Data Store. The Merchants may be disqualified from participation based on their MCC, Merchant ID, Annual Dollar Volume, Annual Transaction Volume, or Acquiring Bank. Whenever information is changed in the Merchant Table (1.1.4), the merchants must be
- 10 requalified by execution of the Merchant Qualification Processing Step (1.1.9) which requires comparison of the Merchant data in the Merchant Table (1.1.4) with the Merchant Qualification Criteria (1.1.10).

- The Offer Development process is detailed in Fig. 1.2. In step (1.2.7) the Dealmaker, working with the Merchant, creates a new proposed promotion. A
- 15 promotion will contain one or more offers to be delivered to cardholders. The promotion contains the basic information common to the related offers. The promotion information required of the dealmaker or merchant includes: Name (a short name for the promotion, e.g., "Toys 'r' Us National Spring 96 Sales Campaign"); Begin Date (Month and Year-all promotions begin on the first of the month); End
- 20 Date (Month and Year-promotions always end on the last day of the month); Description (a multi-line detailed description of the promotion).

- Dealmakers and merchants can customize their offers in several ways to best suit the merchant's need and goals. Offer discounts can be either a percentage of dollar amount. Discounts can apply only to first purchases or to all purchases or can
- 25 be phased with different discounts between the initial and subsequent purchases. Discounts can be limited by requiring a minimum purchase or maximum discount per cardholder or maximum audience size, i.e., by capping the number of cardholders who can receive the offer.

- The ability of merchants to target a specific population of cardholders based
- 30 on purchasing behavior and account characteristics is an important element of the Program. Merchants can select targeting criteria based on the following cardholder data: state of residence; ADI (Area of Dominant Influence, a television marketing

term that defines metropolitan areas); ZIP3 (first three digits of the cardholder's zip code); months since last move; credit limit; open to buy (credit limit-current balance); purchase history and travel information.

Purchase history is a particularly important targeting criteria. The Program maintains a purchase history for each of the participating issuer's cardholders in which the number and dollar volume of a cardholder's transactions are summarized into three types of quarterly "buckets"; by merchant, MCC (Merchant Category Code), and overall. Merchants may also target cardholders based on travel data, i.e., the number of trips to a particular destination airport per quarter (where plane tickets were charged on the consumers participating bankcard). Finally, merchants can target consumers base on their response rate to prior Program offers, specifically the number of responses to offers by quarter, either overall, by MCC or by merchant. All purchase history transaction data is summarized in calendar quarter buckets. The Program maintains five quarters of data, the current and the last four complete. For targeting purposes, cardholder activity can be summarized over any combination of quarters which need not be consecutive.

When targeting a cardholder population, merchants can use any or all of the characteristics listed above and logical "and" and "or" operators can be used to combine criteria. In (1.2.1) Dealmakers, can create one or more batch queries which can be executed nightly to determine the number of cardholders which meet the merchants target criteria. Batch queries are entered through the Offer Target Query Screen (1.2.2) and are stored in the Batch Queries File (1.2.3). The Batch Queries are executed and matched against the Program Match File (1.2.18) in step 1.2.4. Batch query results are stored in 1.2.5 and are supplied to the Dealmaker or Merchant on Query Status Screen (1.2.6).

The finalized offers are then added to the Offers Table (1.2.8) and assigned to one of three value tiers based on a value score proportional to the expected transaction dollar volume, a measure of the expected value of the offer to cardholders. The value score is calculated as a function of 6 parameters:

- (1) Discount percentage. For offers which have "stepped" discounts, the higher discount level is used. For offers which a dollar off rather than a percent off, the dollar amount is converted to a percent by dividing it by the minimum purchase if

there is one, or the average merchant ticket amount if the offer has no minimum purchase.

(2) Targeting Score. This factor is intended to reflect how targeted the offer is and can take one of three discrete values.

5 (3) Average Ticket. This is the merchants average ticket over the preceding twelve months.

(4) Duration Score. This factor is intended to reflect the number of times a cardholder can act on an offer. Offers in which only the first purchase is discounted are given a 1. Offers in which subsequent purchases are discounted a lesser amount
10 are given a 2, and offers in which all purchases are discounted the same amount are given a 3.

(5) Industry Volume Score. This parameter is used to take into account the transaction level of the MCC. The Score can be either 1, 2 or 3 depending on the merchants MCC.

15 (6) Minimum Purchase Required. Offers which require a minimum purchase receive a 1 and offers which do not receive a 2.

The Value Score is currently calculated as a linear function of these parameters (except $10/\text{SQRT}(\text{Avg. Ticket})$ is used instead of Average Ticket). The seven constants in the formula are calculated by least squares linear regression using
20 total transaction dollar volume data as it becomes available. Other more complicated predicting formulas may be used and are under examination including neural networks.

Offers are placed in one of the three value tiers based on their value score. The minimum value score for each tier is stored in a table and can be updated as
25 needed to provide for a more even distribution of offers among the tiers. After the value tier assignment is made it is displayed on-line for the dealmaker or merchant to review.

In step (1.2.9) the dealmaker creates an offer graphic to be used as an overlay on the receiving cardholders bankcard statement sent. Dealmakers/ Merchants can
30 select a logo from the Program standard library. If the dealmaker wishes to use a logo that is not in the library, he can request a custom logo on-line. The custom logo request will be routed to Program Headquarters. The dealmaker then forwards the

artwork and a fee. After Program Headquarters loads the new logo into the library, the dealmaker will receive on-line notification that the logo is ready for use. All offer overlays are required to follow the same general approved format. The Offer Management system will generate all overlays using the data elements selected by the dealmaker. Each month these files are sent to the offer delivery system for loading into the production library.

In step (1.2.11) the Dealmaker generates the contracts which must be executed by the merchant and its acquirer before a merchant offer can be accepted in the Program. The contracts are then forwarded to the necessary parties. A participating merchant must have an Executed Offer Addendum Agreement for each Program offer they wish to make. Every offer maintained in the Program "deal warehouse" must have an active and mutually executed addendum. Once an offer addendum has been signed by the merchant and Acquirer, it is mailed to the Program Headquarters for approval and storage.

In step (1.2.16) the program administrator reviews the offers and verifies that: the copy and logo are in sync; the logo and copy meet technical standards (overlay dimensions, font, excessive use of black toner, 240 dot per inch (dpi) resolution quality graphics) the offer meets the substantive standards required by the program; the offer copy and overlay match the description in the contract addendum; the offer text has no typographical errors and accurately conveys the information on the merchant overlay and Offer Addendum; an executed Master Contract with the Merchant and Acquirer is on -file and active; the offer meets any pricing standards required by the program; the Merchant's current status is favorable; and the Merchant passes all Program risk controls. If the offer fails one of the above test, it is rejected and sent back to the dealmaker to be brought into compliance. Otherwise, a Program representative will sign the Offer Addendum and officially release the Merchant's offer(s) into the "deal warehouse" for matching.

Fig. 1.3 details the Offer Management process. In step (1.3.1) Issuers are able to review each of the offers in the Card Group Offers Table (1.3.14) which contains the specific offers that will be delivered to the cardholders in each of the issuers card groups. Issuers can review the effect that their preferences and exclusions had on the current month's offers and during the review process can manually block or

preference specific card groups from receiving particular offers using the Offer Warehouse screen.

If the merchant offer information is complete, merchant offers which are not blocked are locked in and released for the matching process in step (1.3.5). Offers for which the merchant information is not finalized are removed.

During step 1.3.8 Generate Merchant Offers, Merchant's outlet entitlement criteria is applied to all of a merchants outlets. Those outlets which meet the criteria are eligible to participate in the offer and are added to the Merchant Offers File (1.3.9) as a new record. The outlet entitlement criteria currently available for use by merchants are 1) Outlet #, 2) Outlet City, State 3) Outlet State, 4) Outlet ADI. If a merchant opens any additional qualifying outlets during the promotion run, those outlets will be automatically identified during the daily Merchant Update Process (1.1.3), added to the participating outlets list, and sent on the daily Merchant Offers file (1.3.9) to the merchant processor for outlet entitlement.

In step (1.3.12) the locked in merchant overlays in the Overlay library are delivered in the Overlay Files (1.3.13).

Fig. 1.4 details Issuer and Card Group Management through which cardholder information and cardholder segmentation by the issuers is received into the program. This information includes the Issuers' Processor Client number which is used to identify participating cardholders and tickets during the Cardholder Extraction process. Issuers also provide the definitions of one or more Card Groups into which their participating cardholders are segmented. The Card Group information may be provided either on the Issuer Setup Form (1.4.1) or electronically through a direct link between the Issuer and Program Headquarters (not shown). The received information is written and stored in the Issuer Table (1.4.6) in the Issuer Data Store. Additional or modified information on either new or existing issuers can be entered in the Issuer Table (1.4.6) through the Add or Modify Issuer Information process (1.4.2).

Issuers can prevent any of their cardholders from receiving particular offers by defining issuer-level merchant exclusions which can be entered into the Issuer Table (1.4.6) using the Issuer Preference Maintenance Screen (1.4.5). Issuers can define exclusions based on Program Merchant ID; Merchant MCC or MCC Cluster (or all

offers from a particular MCC or MCC Cluster except those from particular enumerated merchants); or Merchant Type (i.e., National/Regional or Local).

The Card Group definitions are entered in the Card Group Table (1.4.8) in the Issuer Data Store, through the Card Group Maintenance Screen (1.4.7). The Card Group Table (1.4.8) includes the text description included on the cardholders statements to identify Program credit and return transactions. This description is placed in the same field in the cardholders statement in which the merchant's name appears in the record of the associated sale transaction. One descriptor will be provided for each Issuer Card Group. Though, the Issuer may elect to provide the same descriptor for all Issuer/Card Groups. These credit and return transaction descriptors are limited to 22 characters to ensure that the same descriptor can be used for both Visa and MasterCard transactions.

Issuers can separately affect the offers received by the members of different Card Groups by providing merchant exclusion and prioritization parameters for each Card Group. This information is entered through the Card Group Preference Maintenance Screen (1.4.7) and is stored in the Card Group Preferences Table (1.4.11). Issuers can include, exclude or prioritize offers for each Card Group based on the following merchant parameters, Program Merchant ID Number; Merchant Category Code, Merchant Type (National/Regional, or Local). Using this automated process, issuers can largely avoid manually reviewing and ranking offers within each card group. Use of the parameters and Card Groups provides an automated and manageable process for issuers to deal with the large number of offers and potential contractual conflicts (e.g., Affinity or Co-brand programs) while at the same time allowing for differentiation (and competition) from other issuers. A history of all changes made to the ranking and selection rules is maintained for audit and control purposes.

The Issuer and Card Group Description Table is stored at the merchant processor and provides the credit and return transaction descriptor text to be used for each member financial institution. This text is placed in the credit and return transactions and is printed on the cardholders statement. Each issuer will have different text, thereby allowing them to distinguish and "brand" their card groups. Each month, the processor loads the new Issuer/Card Group Descriptions File (1.4.21)

whereby the records in the Issuer and Card Group Descriptions File (1.4.20) are added to the Table.

The Cardholder and Ticket Tape Processing steps to create and update the Program Match File (1.2.18) are detailed in Fig. 1.5. In Step (1.5.6), the processor, using the Issuer Card Groups, extracts the tickets for each participating Program issuer and writes them to an extraction file (1.5.2). This file will, at the end of the process, contain all of the tickets for the participating issuers (not just the tickets for participating cardholders). This extraction process takes one of two forms depending on whether or not the Issuer is new to the program. When a new issuer joins the program a New Issuer One-Time Load is required in which all tickets for the past 122 days are extracted from the processor on-line database. For issuers who are already participating in the program, only the past day's tickets are extracted.

The resulting Daily Tickets File (1.5.2) is preprocessed to add additional fields. The resultant records are added to the previous days tickets (1.5.2) to create a new Ticket Summary File (1.5.5). This process uses merchant and MCC information found in the Merchant Xref Table (1.5.9) and the MCC Xref Table (1.1.12) to provide the cross-reference numbers for MCCs and merchants. The Ticket Summary File summarizes cardholder purchase activity by merchant, MCC, MCC Cluster, and Airline Destination City. The file stores transaction and dollar amount totals for all sales and returns (not just those under the Program) for each of the last five quarters (four quarters plus the current quarter). This update process is run daily.

The Program Cardholders File (1.5.8) is created in step (1.5.15) which is repeated monthly. The Extract Program Cardholders File (1.5.15) which was created in the Cardholder Extraction Process is received, formatted and preprocessed to add additional fields. Additional data elements are then added to the records including the cardholders' ADI, found in the Geographic Data File Table (1.5.1). Cardholder records with a 'Z' in the Card Group field (i.e., records for cardholders who have been excluded from participating in the program by their issuer) are not included in the Program Cardholders File (1.5.15).

Monthly Match File Creation (1.5.16) is run where a participating cardholder's purchase information, stored on 1.5.5, is merged with the cardholder information,

stored on 1.5.8, to create the Program Match File (1.2.18) which is used during Cardholder Offer Assignment (1.7.1).

During the daily ticket processing in step (1.5.3), a copy of each Program ticket and return is saved in the Detail Response File (1.5.11). This table is used to
5 monitor the offers, and create management and member reports. Similarly a record of each non-program return transaction, regardless of issuer is saved in the Returns File (1.5.12). Only return records from the last 90 days are maintained in this file, older records are purged. The purpose of this file is to allow for easy monitoring of potential fraudulent return activity.

10 In Step 1.5.14 the Offers Table (1.2.8) and Card Group Offer Table is updated daily with information from the Detail Response File (1.5.11) in order to allow tracking of offer performance on a daily basis. Offer response data added to the Offers Table (1.2.8) through this process includes: Number of Purchases (add day's transactions to current total); Gross Purchase Amount (add day's ticket amounts to
15 current total ticket amount) as well as Number of Returns and Gross Return Amount.

Fig. 1.6 details the Cardholder Extraction process. Through this process, the Master File of participating cardholders and their card group assignments is updated monthly. In step (1.6.1) the issuers in the Program define a Card Group for each of their participating cardholders. As described above, Card Groups are used to segment
20 the issuer's cardholders into manageable categories for purposes of ranking Program offers and specifying custom selection criteria. The grouping characteristics are determined by the issuer who codes each cardholder account with a one a one-character Card Group identifier via a "non-monetary" electronic transaction. Correspondingly, an Offer Management System screen will setup the same Card
25 Group identifiers and issuer-chosen descriptions so that the card groups can be used in both screen displays and reports to categorize, summarize, and manage sets of cardholders.

Each issuer can define as many as 36 different card groups each of which is represented by a single character '0' through '9' and 'A' through 'Z'. A value of Z in
30 the Card Group field on a cardholder's record in the Cardholder Master File means that the cardholder has not been selected to participate in the Program. Participating

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30 the Card Group field on a cardholder's record in the Cardholder Master File means that the cardholder has not been selected to participate in the Program. Participating

cardholders are those who have not opted-out and whose issuing bank has selected them for participation (by not assigning them to card group Z).

5 The non-monetary electronic transactions (1.6.4) through which the issuer sends the processor the cardholders Card Group can be submitted by the issuer at any time, are processed as they are received, and are used to update the Cardholder Master File (1.6.5). The updated information will not be reflected in the Program Master Database, however, until the next monthly processing cycle.

10 The Issuer Definition File (1.6.8) which contains a unique client number for each participating issuer is received into the system each month and used to update the Issuer Control file which is matched against the Cardholder Master File in the final Cardholder Extraction in which the records of all of the cardholders for each of the participating issuers are copied from the Cardholder Master File to the Extracted Program Cardholder File.

15 Fig. 1.7 details the Offer Assignment process. After offers have been received in the Offer Management System and assigned a value tier, but before the offer warehouse is opened for matching, each Card Group's preference criteria are applied to the available offers. This results in six value tiers of offers A1, A, B1, B, C1 and C for each card group where the "1" value tiers meet the preference criteria specified by the issuer for that card group.

20 The first step in assigning offers to a cardholder is to determine the Card Group to which the Cardholder belongs. The matching engine then uses the Match File (1.2.18) and the Card Group Offers Table (1.3.14) assign offers from that Card Groups A1 tier until a pre-set number of assignments have been (currently 10). If the engine does not find 10 offers in tier A1, it either goes to tier A or B1 depending on whether the issuer has chosen "Value" or "Preference" matching. If an issuer chooses
25 "Value Matching" the tiers are ranked A1, A, B1, B, C1, C. If the issuer chooses "Preference Matching", the tiers are ranked A1, B1, C1, A, B, C. Once a cardholder is assigned ten offers the engine moves on to the next cardholder. During this first pass, a counter is kept of the number of cardholders assigned an offer.

30 After all cardholders have been assigned ten offers, a second "fair share" assignment pass is made. Two critical factors create the need for a second "fair share" offer assignment pass. First, cardholders are read in sequential order (i.e. grouped by

Issuer). Second, some merchant offers are capped (i.e., are sent to a limited number of cardholders). Without a fair share pass, cardholders at the bottom of the list would never receive capped offers. During the "fair share" run, offers which are "oversubscribed" are reallocated evenly throughout the list of cardholders. E.g., if the offer was over subscribed by a factor of 10 every tenth cardholder who received it in the first pass gets it in the second pass. At the end of the second assignment pass, cardholders keep the first six offers still available to them from the ten assigned during the first pass.

In step (1.7.5), after the assignment process is completed, the Selected Offers Files are created. For each Card Group, the total number of cardholders assigned to each merchant offer is determined and stored in the Issuer/Card Group Offers Tables. The Assigned Offers Summary File (1.7.3) is created containing one record for each merchant offer delivered to one or more cardholders in any Card Group, and is used to in step (1.7.4) to verify that each merchant offer in the file has a corresponding offer overlay. The absence of an overlay is communicated to the Program Headquarters so that the offer overlay can be transmitted for inclusion in the overlay library

Fig. 1.8 details the offer delivery system. In step 1.8.10, the Cardholder Selected Offers File (1.7.5) is received into the statementing system each month. This file contains the cardholder account and the merchant offers that the cardholder will be delivered. The Cardholder Selected Offers File is then matched with the Overlay Library (1.3.13) which contains each of the possible offer overlays for the current month. Each offer overlay in the Overlay Library is coded to match a unique merchant offer. Each cardholder record delivered in the Cardholder Selected Offers file contains one or more of these merchant offer identifiers.

In step (1.8.2) the Cardholder Statements with the appropriate offer overlays are printed. Before the offers are printed, however, the Issuer Policy Information must be matched with the statementing accounts in the Cardholder Statement Data file (1.8.1) from the nightly cycle to determine which cardholders get statemented. Because the cardholder characteristics may have changed between the time that the cardholder was identified as eligible for certain offers and the time the statement is actually printed, the system performs edits against the cardholder account, to confirm

that the cardholder has not opted-out or otherwise become ineligible for the program and may have to be excluded from receiving an offer page.

After the statements are printed, the system creates a Cardholder Statement Positive File (1.8.3) which contains a record for each cardholder who was delivered a
5 Program statement page. Similarly, a Cardholder Statement Negative File (1.8.7) is created which contains a record for each cardholder who did not receive a Program statement and a reason code indicating why no statement was sent. In step (1.8.8) the Cardholder Statement Positive file (1.8.3) is used to update a variable within the Offers Table (1.2.8) which tracks the running total of the number of cardholders
10 which have been delivered an offer.

The Cardholder Statement Positive File (1.8.3) is also delivered daily to the two subsystems which process the cardholder and merchant transactions. In step (1.8.4), the cardholder processor adds the offers contained in the File to its own Cardholder Offers Table which contains all active offers and expired offers for a
15 period of six months beyond the expiration date. Similarly, in step (1.8.5) the Cardholder Statement Positive File is used to update the merchant processor's Cardholder Offers file which contains an up-to-date account of all offers that have been delivered to a cardholder in the past 180 days.

Fig. 1.9 details the Offer Fulfillment process. In Step (1.9.1), Merchant
20 Entitlement to participate in the Program for the month is set. The Merchant Offers File (1.3.9) which contains information on participating merchants is transmitted to the Merchant Processor where the information from the file is added to existing merchant accounts processing information. Thereafter, when a participating merchant makes a sale to a qualifying cardholder who has received the merchants discount
25 offer, the cardholder will receive the discount as an automatic credit without any further action (beyond normal credit card sales processing) on behalf of either the merchant or the cardholder. In Step (1.9.3) the merchant transmits the sales draft to the processor as it would any other credit card sale. The processor then determines whether the card holder is entitled to a credit on the transaction by comparing the
30 transaction information from the draft with the Merchant Entitlement information in the (1.9.2) file and the Cardholders Offers Table (1.9.6). The logic of this determination process is shown explicitly in Fig. 2. A cardholder is eligible for a

Program credit if: (1) they purchased goods or services from a merchant who is currently participating in the Program; (2) they were designated as being eligible for a merchant offer (i.e., they were sent an offer along with their monthly bankcard statement); (3) they met the requirements of the specific offer being run by the merchant (e.g., have made the minimum purchase); and (4) the sale is made during the offer period.

The Program credit is then generated in step (1.9.7). The amount of the credit depends on the details of the offer (e.g., discount percentage and or amount) which are contained in the Merchant Offer Table. For processing through the interchange, the credit transaction is assigned the same transaction number as its associated purchase transaction. Special product codes are create which corresponding to either Visa or MasterCard Program credits. A description of the credit transaction is taken from the Issuer/Card Group Descriptor Table which is indexed by issuer ID and Issuer Card Group. These two values are retrieved from the Cardholder Offers Table and used as the unique key to look up the appropriate record in the Issuer/ Card Group Descriptor Table, the credit transaction description text is retrieved from the record and incorporated into the available text space on the credit transaction. The maximum text length is 22 characters so that the same text can be used for both Visa and MasterCard transaction.

If the draft submitted in step (1.9.3) is a purchase reversal (a return of merchandise) the merchant processor checks the Merchant Processor USAVE Transaction Database to 1) determine if the cardholder had previously transacted on an offer from the merchant, and 2) if the purchase amount of the offer matches the returned amount on the purchase reversal. If both conditions are true, a debit is generated, in the step (1.9.7), for the amount as the previously issued credit. This permits the merchant to recoup the credit they had issued on the original transaction.

In step (1.9.10) the processor sends the transaction through the Interchange. In step (1.9.12) the issuer's processor accepts the interchange transaction, recognizes and flags it as a Program transaction and updates the Ticket Database (1.9.14) to include the transaction. This information is passed back and updates the ticket file and the response file.

This detailed description is of an embodiment of the invention in a credit card processing environment. Upon reviewing the disclosure herein, embodiments of the invention in any other payment transaction processing system, including checks, debit cards, private label cards, and on-line electronic payment systems will be obvious to those of ordinary skill in the art. Similarly, though the communications and statements in the embodiment described in the detailed description take the form of printed mailings, it would be equally obvious to one of ordinary skill in the art that they could be replaced with electronic visual or audio communications. Such variations or modifications are intended to be encompassed within the scope of any claims to patent protection issuing upon this invention.

WHAT IS CLAIMED IS:

1 1. A method for operating a general purpose digital computer having data
2 storage memory for a targeted payment system discount program comprising the steps
3 of:

4 (a) data storing information on individual consumers supplied by
5 one or more payment systems institutions each of which supplies payment means to a
6 subset of said consumers, said consumer information includes the targeted
7 characteristics of said individual consumers;

8 (b) data storing in a computer memory information on merchant
9 discount offers obtained from one or more acquiring financial institutions each of
10 which services a subset of said merchants, said merchant discount offer information
11 includes the discount amount, transaction requirements and consumer target criteria;

12 (c) identifying qualifying consumers for particular merchant
13 discount offers by computer matching said offers' target criteria with the consumers'
14 targeted characteristics; break

15 (d) comparing consumer transactions with the transaction
16 requirements of the discount offers for which the consumers qualify; and

17 (e) automatically applying to the qualifying consumers' payment
18 systems accounts the discount amounts for offers for which the qualifying consumers
19 meet the transaction requirements.

1 2. The method of claim 1 wherein the information on individual
2 consumers is supplied by a plurality of payment systems institutions; break

1 3. The method of claim 1 wherein the information on merchant discount
2 offers is obtained from a plurality of acquiring financial institutions.

1 4. The method of claim 2 wherein the information on merchant discount
2 offers is obtained from a plurality of acquiring financial institutions.

1 5. The method of claim 1 further comprising the step of automatically
2 notifying consumers of said merchant discount offers for which they qualify.

1 6. The method of claim 5 wherein the consumers are notified of only a
2 subset of the merchant discount offers for which they qualify.

1 7. The method of claim 6 wherein the subset of merchant discount offers
2 for which the consumers qualify and of which they are notified is determined based on
3 a prioritization of discount offers using a function of expected transaction volume,
4 total discount, and total purchase amount.

1 8. The method of claim 7 wherein said prioritization function is expected
2 response dollar volume which is calculated based on a plurality of parameters relating
3 to each of said offers.

1 9. The method of claim 8 wherein one of said parameters is the offering
2 merchant's past transaction dollar volume.

1 10. The method of claim 8 wherein one of said parameters is the offering
2 merchant's industry's past transaction dollar volume.

1 11. The method of claim 8 wherein one of said parameters is the discount
2 percentage of said offer.

1 12. The method of claim 8 wherein one of said parameters is the ratio of
2 the discount amount of said offer to the average purchase amount at the offering
3 merchant.

1 13. The method of claim 8 wherein one of said parameters is the ratio of
2 the discount amount to the minimum purchase requirement of said offer.

1 14. The method of claim 8 wherein one of said parameters is the ratio of
2 the minimum purchase requirement of said offer to the average purchase amount at
3 the offering merchant.

1 15. The method of claim 8 wherein one of said parameters is the level of
2 targeting of said offer.

1 16. The method of claim 8 wherein one of said parameters is the average
2 purchase amount at said offering merchant.

1 17. The method of claim 8 wherein one of said parameters is a function of
2 limitations placed on the discounts available under said offer.

1 18. The method of claim 8 wherein one of said parameters is the number of
2 discounted purchases which can be made under said offer.

1 19. The method of claim 8 comprising the further step of using a computer
2 and the information on actual transaction dollar volumes resulting from merchant
3 discount offers to update the function used to calculate expected transaction dollar
4 volume to make it a more accurate predictor of actual transaction dollar volume.

1 20. The method of claim 1, wherein the consumer's payment systems
2 financial institution can affect the merchant discount offers received by the consumer.

1 21. The method of claims 1 comprising the further step of automatically
2 filtering the merchant discount offers for which a consumer otherwise qualifies based
3 on filter criteria provided by the consumer's payment systems institution.

1 22. The method of claim 21 wherein said filter criteria includes at least one
2 of demographic characteristics of the consumer, the type of credit instrument,
3 characteristics of the offer, and characteristics of the offering merchant.

1 14. The method of claim 8 wherein one of said parameters is the ratio of
2 the minimum purchase requirement of said offer to the average purchase amount at
3 the offering merchant.

1 15. The method of claim 8 wherein one of said parameters is the level of
2 targeting of said offer.

1 16. The method of claim 8 wherein one of said parameters is the average
2 purchase amount at said offering merchant.

1 17. The method of claim 8 wherein one of said parameters is a function of
2 limitations placed on the discounts available under said offer.

1 18. The method of claim 8 wherein one of said parameters is the number of
2 discounted purchases which can be made under said offer.

1 19. The method of claim 8 comprising the further step of using a computer
2 and the information on actual transaction dollar volumes resulting from merchant
3 discount offers to update the function used to calculate expected transaction dollar
4 volume to make it a more accurate predictor of actual transaction dollar volume.

1 20. The method of claim 1, wherein the consumer's payment systems
2 financial institution can affect the merchant discount offers received by the consumer.

1 21. The method of claims 1 comprising the further step of automatically
2 filtering the merchant discount offers for which a consumer otherwise qualifies based
3 on filter criteria provided by the consumer's payment systems institution.

1 22. The method of claim 21 wherein said filter criteria includes at least one
2 of demographic characteristics of the consumer, the type of credit instrument,
3 characteristics of the offer, and characteristics of the offering merchant.

1 23. The method of claim 21 or 22 wherein the effect of said automatic
2 filtering is to prevent particular consumers from receiving particular offers for which
3 they otherwise qualify.

1 24. The method of claim 21 or 22 wherein said automatic filtering affects
2 the prioritization of offers for which the consumer qualifies and may thereby cause the
3 consumer to receive a different subset of the offers for which he qualifies.

1 25. The method of claim 21 or 22 wherein said automatic filtering affects
2 the order in which the offers are printed on the consumer's statement.

1 26. The method of claim 6 comprising the further step of allowing the
2 consumer's payment systems institution to manually prevent particular consumers
3 from receiving particular merchant discount offers.

1 27. The method of claim 6 comprising the further step of allowing the
2 consumer's payment systems institution to manually affect the prioritization of offers
3 and thereby cause the consumer to receive a different subset of offers for which the
4 consumer qualifies.

1 28. The method of claim 1 comprising the further step of allowing the
2 consumer's payment systems institution to manually affect the order in which the
3 offers are printed on the consumer's statement.

1 29. The method of claim 1, comprising the further steps of:
2 (a) automatically determining the number of consumers whose
3 target characteristics match the target criteria of a proposed merchant discount offer;
4 and
5 (b) supplying the merchant with the number of matches so that the
6 merchant can assess the likely success of the proposed offer.

1 30. The method of claim 1, comprising the further step of automatically
2 reporting periodically to the merchant the response rate among consumers to the
3 merchant's offer.

1 31. The method of claim 1 wherein one of said targeted characteristics is
2 the consumer's payment transaction history.

1 32. The method of claim 1 wherein one of said targeted characteristics is
2 the consumer's prior responses to Program offers.

1 33. The method of claim 1 wherein one of said targeted characteristics is
2 the consumer's zip code.

1 34. The method of claim 1 wherein one of said targeted characteristics is
2 the consumer's ADI.

1 35. The method of claim 1 wherein one of said targeted characteristics is
2 the consumer's state.

1 36. The method of claim 1 wherein one of said targeted characteristics is
2 the consumer's spending limit through said payment system.

1 37. The method of claim 1 wherein one of said targeted characteristics is
2 the amount the consumer has available to spend through said payment system.

1 38. The method of claim 1 wherein one of said targeted characteristics is
2 the number of months since the consumer's last change of residence.

1 39. The method of claim 1 wherein said targeted characteristics includes
2 information by the consumer's travel.

1 40. The method of claim 1 wherein said merchant discount offers may be
2 restricted to a limited number of consumers.

1 41. The method of claim 1 wherein said merchant discount offers may be
2 restricted to a limited number of consumers and comprising the further step of
3 distributing said restricted offers so as not to discriminate among participating
4 payment systems institutions.

1 42. The method of claim 1 comprising the further steps of:
2 (a) allowing the consumer's payment system institution to supply
3 custom indicia; and
4 (b) automatically displaying said custom indicia in the payment
5 system institution's communication to the consumer.

1 43. The method of claim 1 comprising the further steps of:
2 (a) allowing the consumer's payment system institution to supply
3 descriptive text; and
4 (b) automatically displaying said descriptive text in the payment
5 system institution's communication to the consumer contiguous to said discount
6 credit.

1 44. The method of claim 1 wherein said merchant discount offers can be
2 limited to particular merchant outlets.

1 45. The method of claim 1 wherein the participating merchants can choose
2 the form of said merchant discount offers including whether said offers (a) involve a
3 flat or percentage discount, (b) apply to single or multiple purchases, (c) have a
4 maximum discount, (d) require minimum purchases, or (e) have a maximum purchase
5 amount.

1 46. The method of claim 1 comprising the further steps of:

- 2 (a) allowing merchants to design offer overlays describing said
3 merchant discount offers; and
4 (b) automatically printing said offer overlays on statements sent to
5 consumers receiving said offers.

1 47. The method of claim 1 comprising the further step of automatically
2 debiting from the consumer's payment systems account discounts received on
3 purchases in which the merchandise is later returned to the merchant for credit.

1 48. A system for a targeted payment system discount program comprising:

2 (a) means for data storing in a computer memory information on
3 individual consumers supplied by one or more payment systems institutions each of
4 which supplies payment means to a subset of said consumers, said consumer
5 information includes the targeted characteristics of said individual consumers;

6 (b) means for data storing in a computer memory information on
7 merchant discount offers obtained from one or more acquiring financial institutions
8 each of which services a subset of said merchants, said merchant discount offer
9 information includes the discount amount, transaction requirements and consumer
10 target criteria;

11 (c) means for identifying qualifying consumers for particular
12 merchant discount offers by computer matching said offers' target criteria with the
13 consumers' targeted characteristics;

14 (d) means for comparing consumer transactions with the
15 transaction requirements of the discount offers for which the consumers qualify; and

16 (e) means for automatically crediting to the qualifying consumers'
17 payment systems accounts the discount amounts for offers for which the qualifying
18 consumers meet the transaction requirements.

1 49. The system of claim 48 wherein the information on individual
2 consumers is supplied by a plurality of payment systems institutions.

1 50. The system of claim 48 wherein the information on merchant discount
2 offers is obtained from a plurality of acquiring financial institutions.

1 51. The system of claim 49 wherein the information on merchant discount
2 offers is obtained from a plurality of acquiring financial institutions.

1 52. The system of claim 48 wherein the consumer's payment systems
2 financial institution can affect the merchant discount offers received by the consumer.

1 53. The system of claim 48 further comprising means for automatically
2 filtering the merchant discount offers for which a consumer otherwise qualifies based
3 on filter criteria provided by the consumer's payment systems institution.

1 54. The system of claim 53 wherein said filter criteria includes at least one
2 of demographic characteristics of the consumer, the type of credit instrument,
3 characteristics of the offer, and characteristics of the offering merchant.

1 55. The system of claim 53 or 54 wherein the effect of said automatic
2 filtering is to prevent particular consumers from receiving particular offers for which
3 they otherwise qualify.

1 56. The system of claims 53 or 54 wherein said automatic filtering affects
2 the prioritization of offers for which the consumer qualifies and may thereby cause the
3 consumer to receive a different subset of the offers for which he qualifies.

1 57. The system of claims 53 or 54 wherein said automatic filtering affects
2 the order in which the offers are printed on the consumer's statement.

1 58. The system of claim 48 further comprising means for allowing the
2 consumers payment systems institution to manually prevent particular consumers
3 from receiving particular merchant discount offers.

1 59. The method of claim 48 further comprising means for allowing the
2 consumers payment systems institution to manually affect the prioritization of offers
3 and thereby cause the consumer to receive a different subset of offers for which the
4 consumer qualifies.

1 60. The method of claim 48 further comprising:
2 (a) means for automatically determining the number of consumers
3 whose target characteristics match the target criteria of a proposed merchant discount
4 offer; and
5 (b) means for supplying the merchant with the number of matches
6 so that the merchant can assess the likely success of the proposed offer.

1 61. The system of claim 48 further comprising:
2 (a) means for allowing the consumer's payment system institution
3 to supply custom indicia; and
4 (b) means for automatically displaying said custom indicia in the
5 payment system institution's communication to the consumer.

1 62. The system of claim 48 further comprising:
2 (a) means for allowing the consumer's payment system institution
3 to supply descriptive text; and
4 (b) means for automatically displaying said descriptive text in the
5 payment system institution's communication to the consumer contiguous to said
6 discount credit.

1 63. The system of claim 48 further comprising:
2 (a) means for allowing merchants to design offer overlays
3 describing said merchant discount offers; and
4 (b) means for automatically printing said offer overlays on
5 statements sent to consumers receiving said offers.

- 1 64. The system of claim 48 further comprising the for automatically
- 2 debiting from the consumer's payment systems account discounts received on
- 3 purchases in which the merchandise is later returned to the merchant for credit.

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Figure 1 - High Level Overview

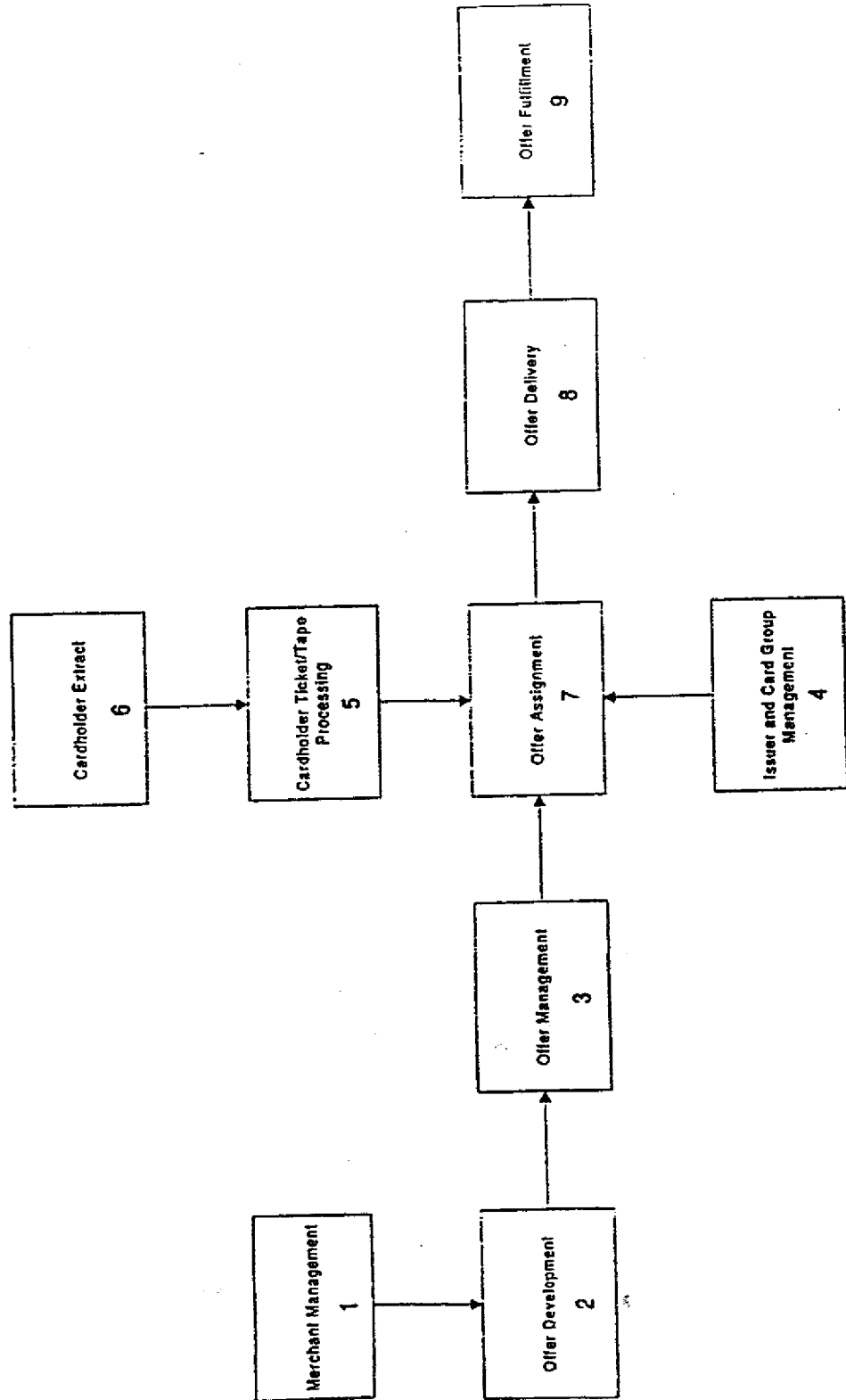


Figure 1.2 - Offer Development

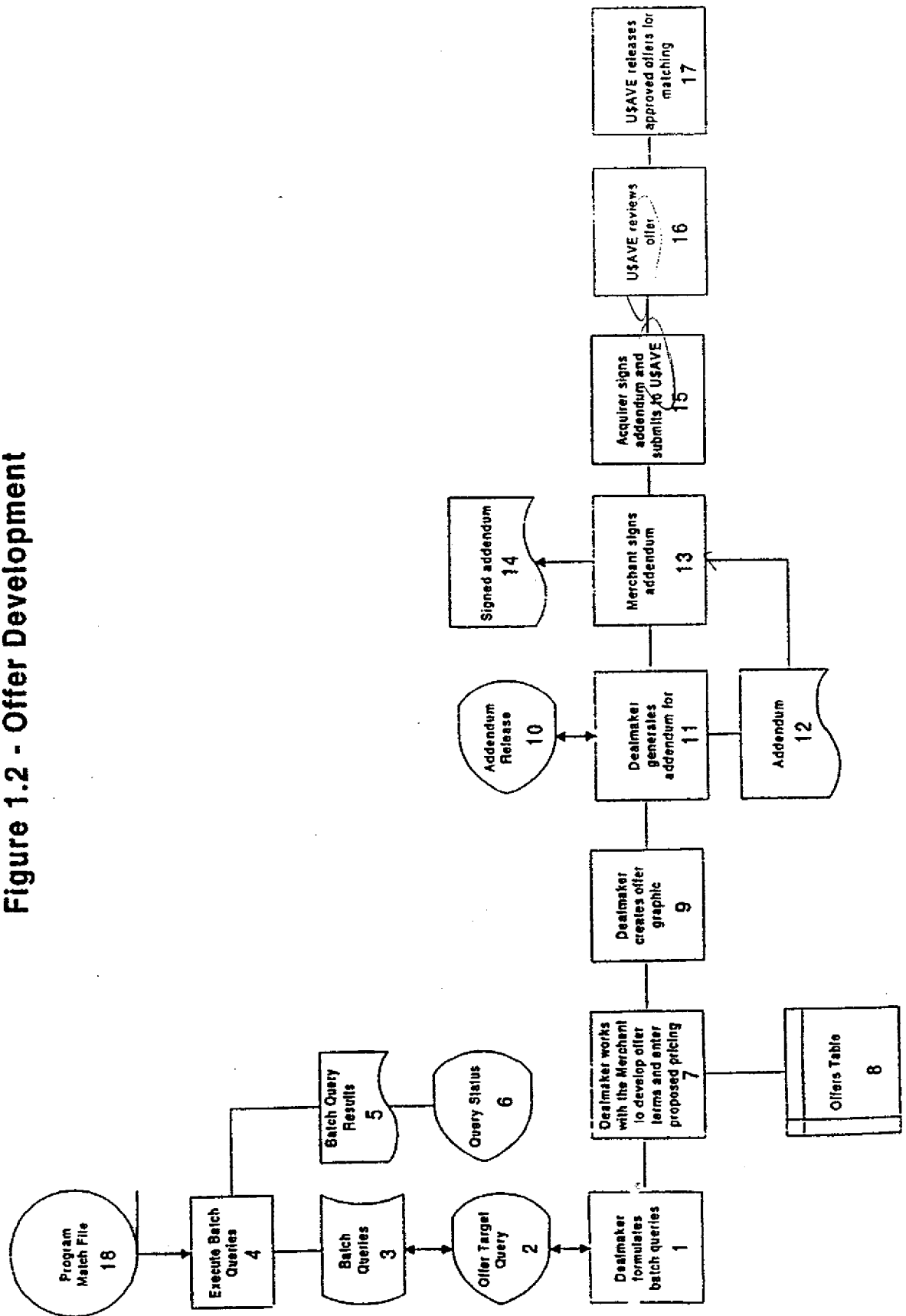
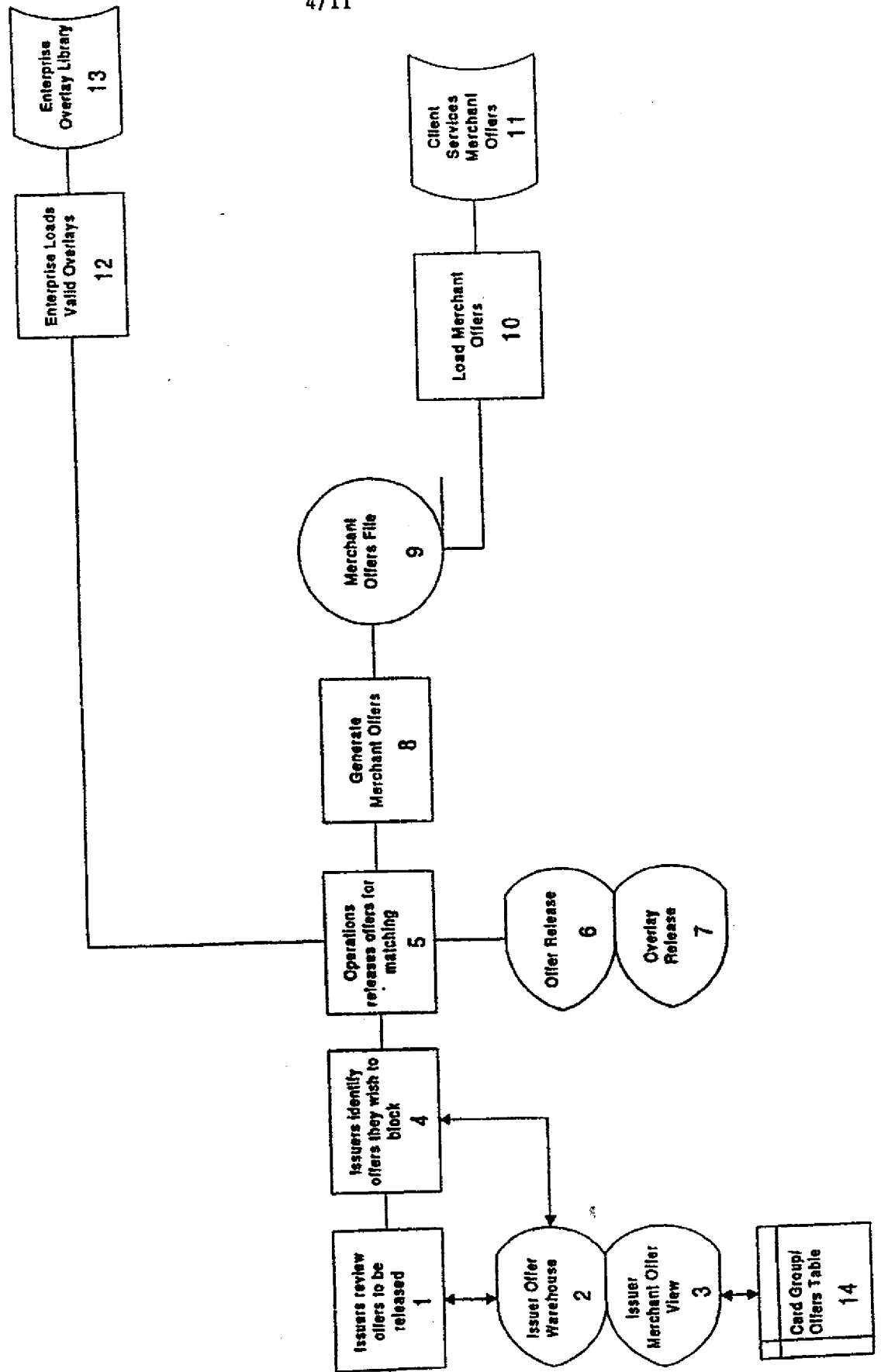
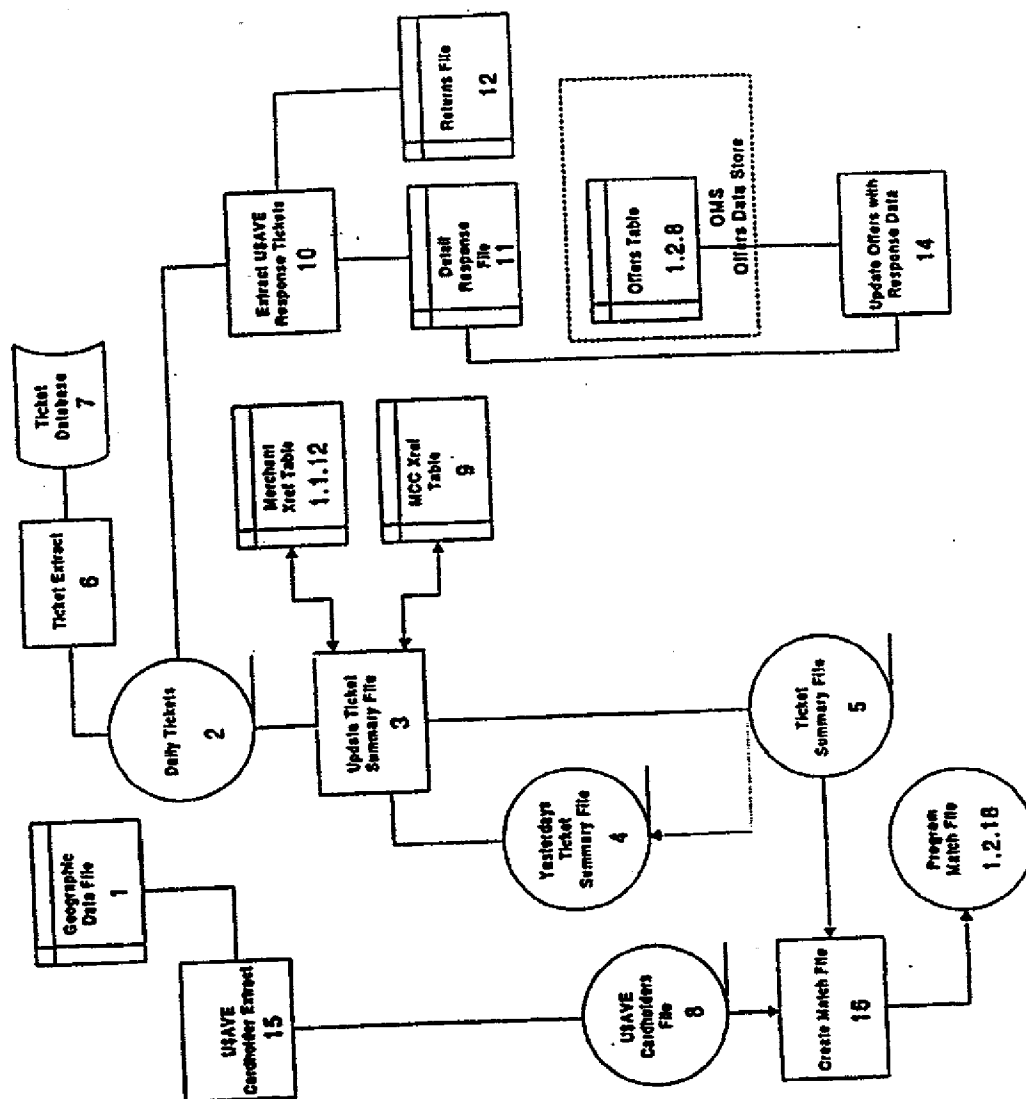


Figure 1.3 - Offer Management



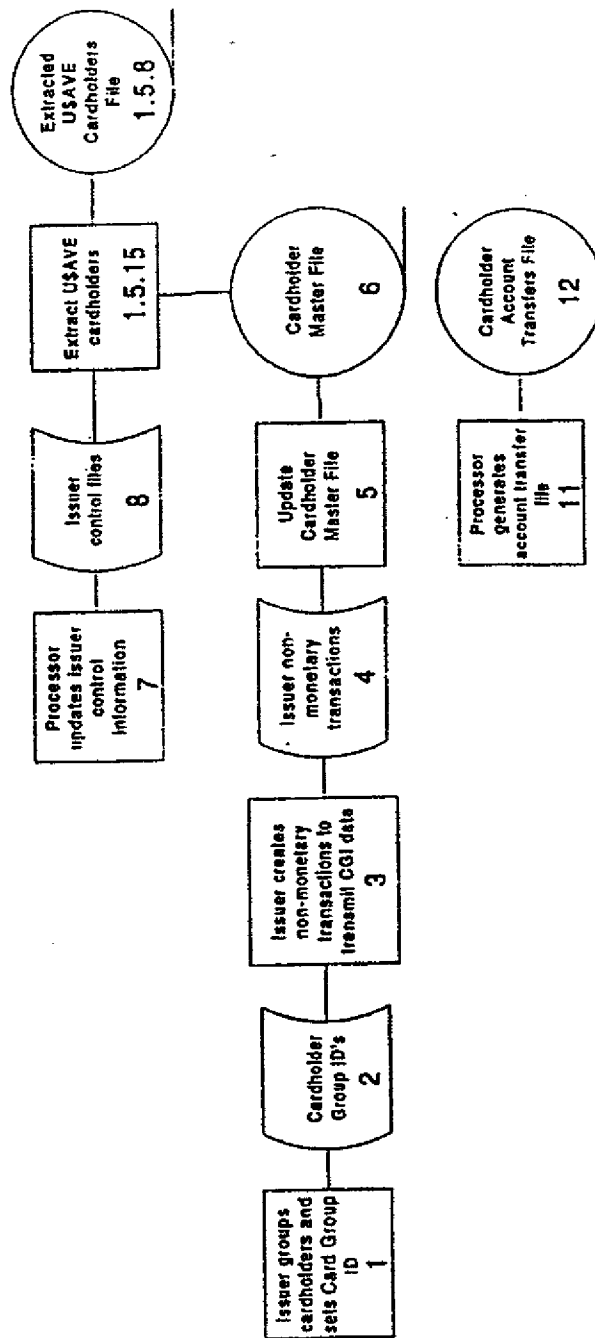
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Figure 1.5 - Cardholder/Ticket Tape Processing



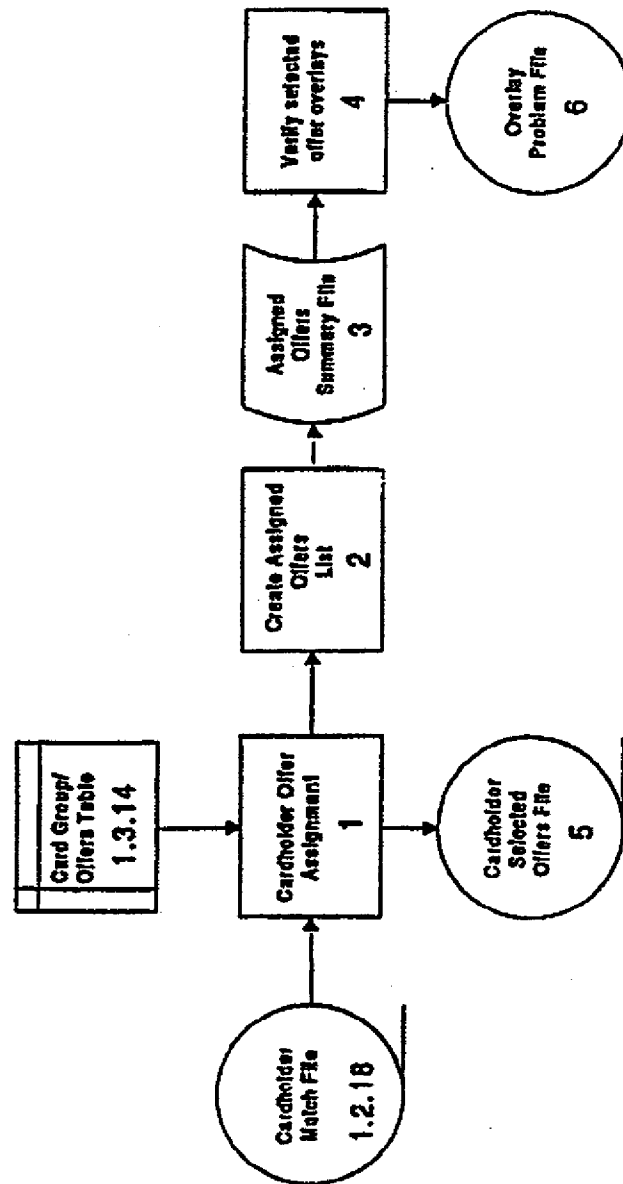
7/11

Figure 1.6 - Cardholder Extract



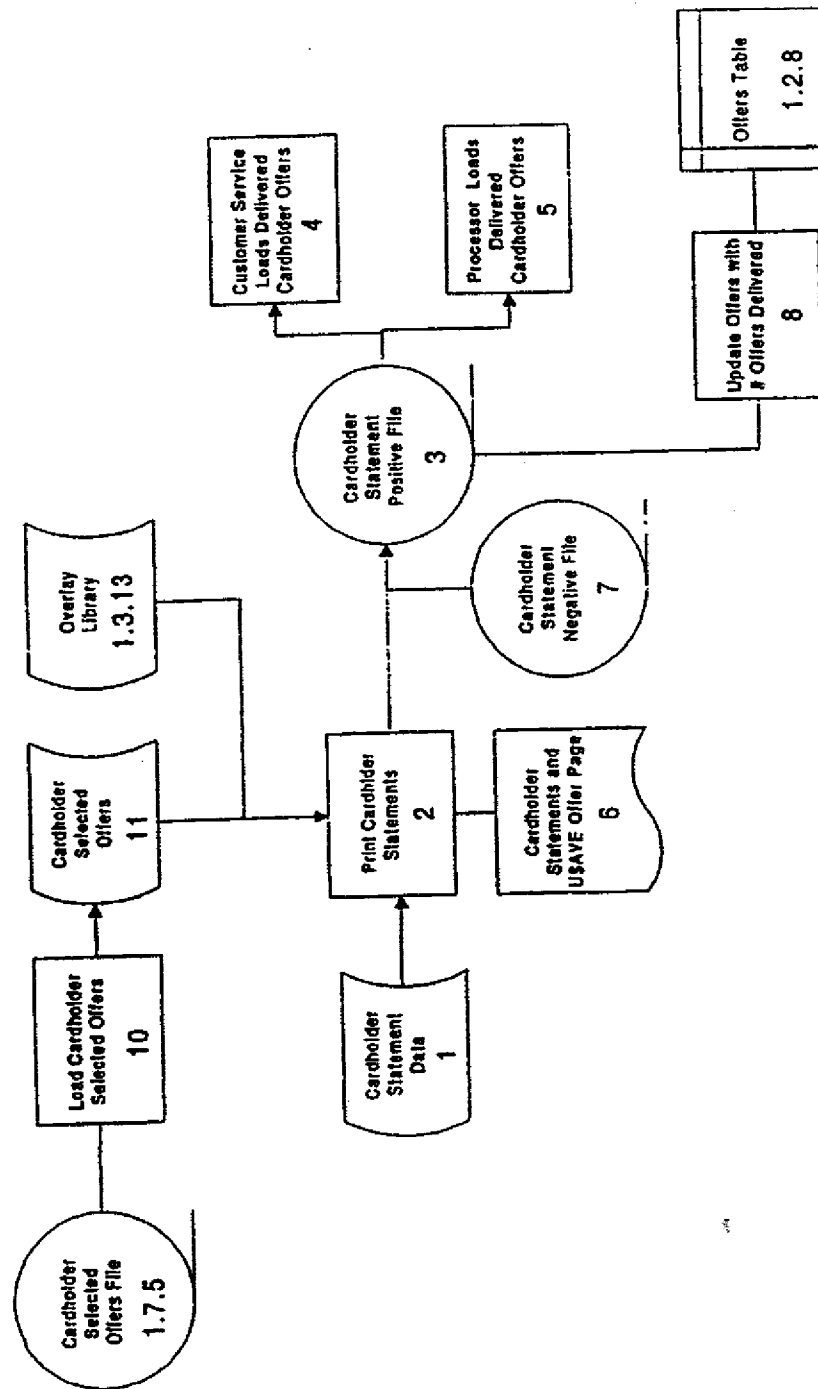
8/11

Figure 1.7 - Offer Assignment



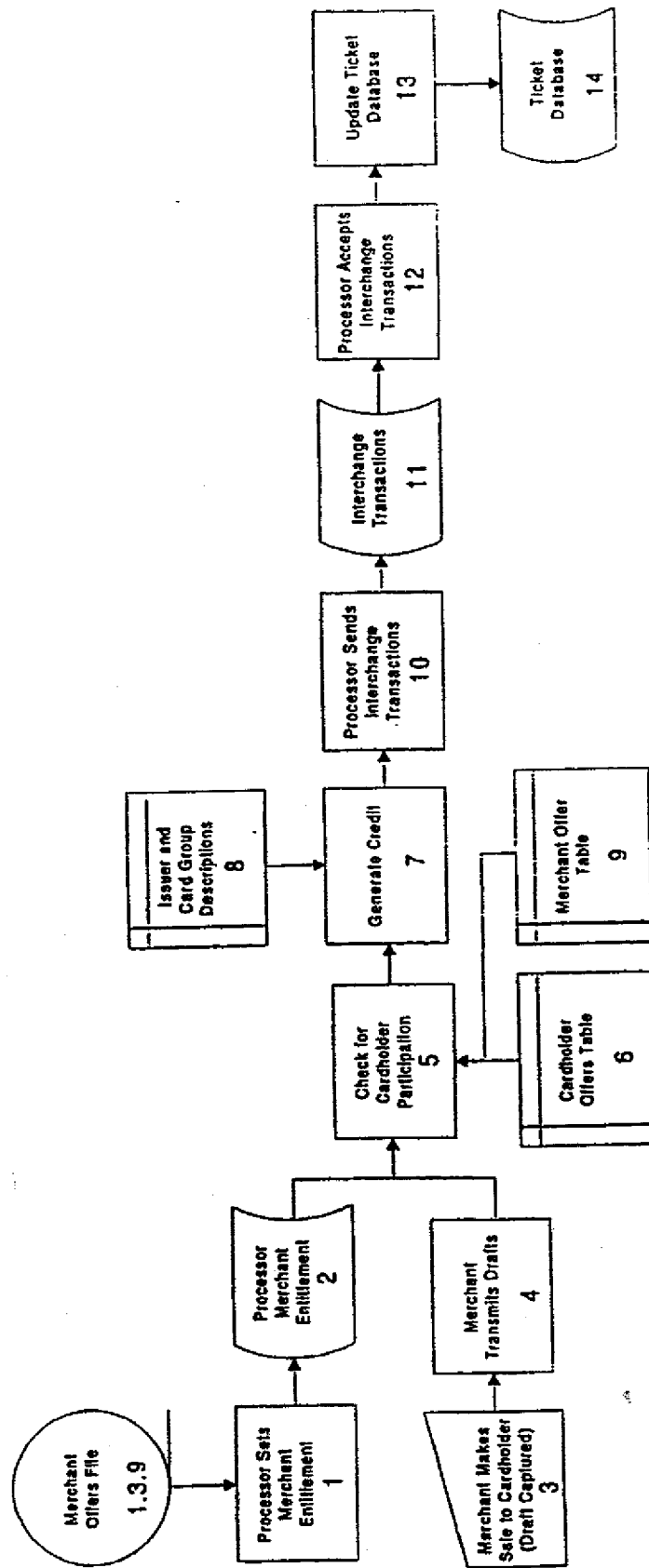
9/11

Figure 1.8 - Offer Delivery

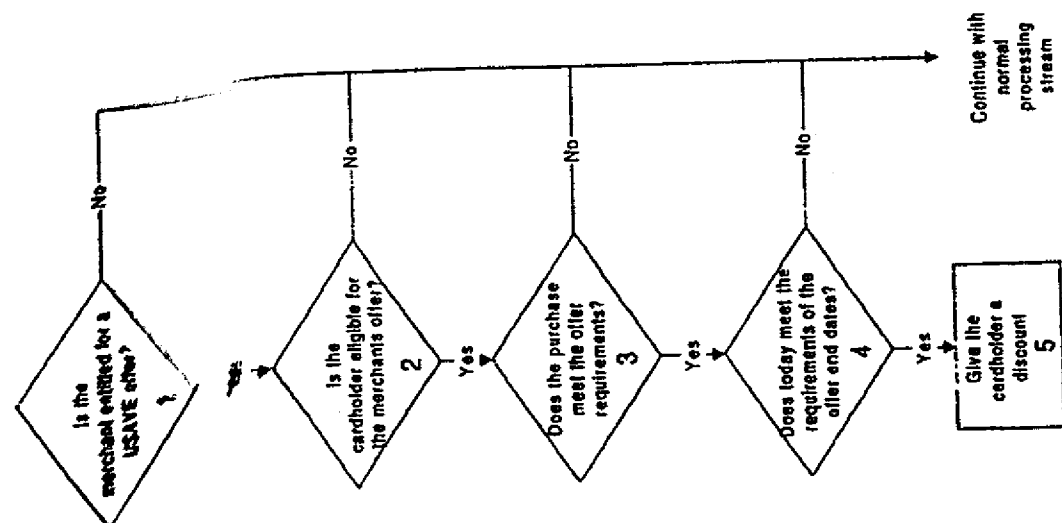


10/11

Figure 1.9 - Offer Fulfillment



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Figure 2 - Check for Cardholder Participation

INTERNATIONAL SEARCH REPORT

Inter- national Application No
PCT/US 97/13588

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G06F17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	<p>WO 95 03570 A (CREDIT VERIFICATION CORP) 2 February 1995</p> <p>see page 6, line 3 - page 7, line 16 see page 12, line 17 - page 14, line 2 see page 41, line 10 - line 27 see page 155, line 5 - page 160, line 9 see page 223, line 22 - page 225, line 21 see page 267, line 10 - page 272, line 16</p> <p style="text-align: center;">-/-</p>	<p>1-5, 31, 32, 44, 45, 48-51 6-30, 33-43, 46, 47, 52-64</p>

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

27 November 1997

Date of mailing of the international search report

04/12/1997

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INTERNATIONAL SEARCH REPORT

Inter. 1st Application No.
PCT/US 97/13588

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KLOKIS H: "UKROP'S TESTS DATA BASE MARKETING PROGRAM ELECTRONIC COUPONING TRACKS BUYING BEHAVIOR OF VALUED CUSTOMERS" CHAIN STORE AGE EXECUTIVE WITH SHOPPING CENTER AGE, 1 September 1987, page 73/74, 78 XP000567643	1-5,31, 32,44, 45,48-51
A	see page 73, column 2, line 5-26 see page 73, column 3, line 9-62 see page 74, column 1, line 12 see page 74, column 3, line 15 - page 78, column 1, line 32	6-30, 33-43, 46,47, 52-64
A	TANNER R: "A NEW DIMENSION IN MARKETING" PROGRESSIVE GROCER, vol. 66, no. 5, 1 May 1987, page 133/134 XP000567198 see the whole document	

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter nat Application No
PCT/US 97/13588

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9503570 A	02-02-95	AU 7402294 A	20-02-95
		EP 0711434 A	15-05-96
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		US 5642485 A	24-06-97



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : G06F 17/60	A1	(11) International Publication Number: WO 00/39720 (43) International Publication Date: 6 July 2000 (06.07.00)
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>(21) International Application Number: PCT/US99/19955</p> <p>(22) International Filing Date: 31 August 1999 (31.08.99)</p> <p>(30) Priority Data: 09/282,747 5 October 1998 (05.10.98) US</p> <p>(71) Applicant (for all designated States except US): WALKER DIGITAL, LLC [US/US]; Five High Ridge Park, Stamford, CT 06905-1326 (US).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): WALKER, Jay, S. [US/US]; 124 Spectacle Lane, Ridgefield, CT 06877 (US). TEDESCO, Daniel, E. [US/US]; Apartment 6, 192 Park Street, New Canaan, CT 06840 (US). TULLEY, Stephen, C. [US/US]; 15 River Place, Stamford, CT 06907 (US). PACKES, John, M., Jr. [US/US]; 21 Frankford Street, Hawthorne, NY 10532-1950 (US). O'SHEA, Deirdre [US/US]; Apartment 2A, 10 Manhattan Avenue, New York, NY 10025 (US). BEMER, Keith [US/US]; Apartment 34B, 225 East 95th Street, New York, NY 10128 (US). JORASCH, James, A. [US/US]; Apartment 5G, 25 Forest Street, Stamford, CT 06901 (US). ALDERUCCI, Dean, P. [US/US]; 19-8 Prospect Ridge Road, Ridgefield, CT 06877 (US).</p> </div> <div style="width: 48%;"> <p>(74) Agents: ALDERUCCI, Dean et al.; Walker Digital Corporation, Intellectual Property Dept., Five High Ridge Park, Stamford, CT 06905-1326 (US).</p> <p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KB, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> </div> </div>		
<p>(54) Title: METHOD AND APPARATUS FOR PROVIDING CROSS-BENEFITS BASED ON A CUSTOMER ACTIVITY</p> <p>(57) Abstract</p> <p>In accordance with the present invention, a controller receives information relating to customer activity with a first vendor, typically via a Web page that a customer accesses. The controller further receives an indication of items the customer desires to purchase, the items having an associated total price. The controller determines, based on any of various criteria, whether to provide an offer for a subsidy based on the information relating to customer activity. For example, a customer that places certain items in his virtual shopping cart may receive such an offer. The offer for a subsidy is from a second vendor (a subsidizing vendor), and may define, for example, a reduction in the price charged for the item and an obligation for the customer to fulfill in exchange for the subsidy. For example, the customer may be obliged to sign up for a credit card or telephone service provided by the subsidizing vendor. An indication of the offer for the subsidy is provided to the customer, e.g., via a text or graphical display on the Web page. The customer responds via known user interface techniques and, if he accepts the offer, he is charged a second price for the items. The second price is less than the total price, and may even be zero. Thus the customer may get his desired items for free in exchange for fulfilling the obligation with the subsidizing vendor.</p>		
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 65%;"> <pre> graph TD 140[SUBSIDIZING VENDOR SERVER 140] --- 110[CONTROLLER 110] 110 --- 120[VENDOR SERVER 120] 120 --- 130[CUSTOMER TERMINAL 130] 100((100)) --> 140 </pre> </div> <div style="width: 30%; text-align: right;"> <p>100</p> </div> </div>		

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EE	Estonia						

**METHOD AND APPARATUS FOR PROVIDING
CROSS-BENEFITS BASED ON A CUSTOMER ACTIVITY**

The present application is a continuation-in-part application of co-
5 pending U.S. Patent Application No. 09/219,267 entitled "METHOD AND
APPARATUS FOR FACILITATING ELECTRONIC COMMERCE THROUGH
PROVIDING CROSS-BENEFITS DURING A TRANSACTION", filed on December
23, 1998; and is a continuation-in-part application of co-pending U.S. Patent
Application No. 09/274,281 (attorney Docket No. 99-006) entitled "METHOD AND
10 APPARATUS FOR PROVIDING CROSS-BENEFITS VIA A CENTRAL
AUTHORITY", filed on March 22, 1999; which is a continuation-in-part application of
co-pending U.S. Patent Application No. 09/219,267 entitled "METHOD AND
APPARATUS FOR FACILITATING ELECTRONIC COMMERCE THROUGH
PROVIDING CROSS-BENEFITS DURING A TRANSACTION", filed on December
15 23, 1998; and is a continuation-in-part application of co-pending U.S. Patent
Application No. 09/116,367 entitled "METHOD AND APPARATUS FOR
PROVIDING A DISCOUNT TO A CUSTOMER THAT PARTICIPATES IN
TRANSACTIONS AT A PLURALITY OF MERCHANTS", filed on October 5, 1998;
the entirety of each incorporated by reference herein as part of the present disclosure.

20

FIELD OF THE INVENTION

The present invention relates to methods and apparatus for facilitating
commerce.

BACKGROUND OF THE INVENTION

There is a great deal of competition among vendors to attract and retain customers. Even when a customer has browsed a vendor's inventory, he will not make a purchase if an item's price is greater than the amount the customer is willing to pay.

5 One way to increase customer willingness to purchase is to provide discounts on items purchased. Unfortunately, vendors must use discounts sparingly, since reducing purchase prices likewise reduces margins and the reduced margins may not be offset by increased sales volume.

A vendor may also offer promotions to provide an incentive for
10 customers to make purchases. For example, a vendor may offer a "buy one get one free" promotion whereby a purchase of an item yields the benefit of an additional item at no cost. Similarly, a vendor may provide a discount on a purchase in exchange for signing up for a credit card account provided by the vendor.

Promotions may also be provided among two or more vendors. For
15 example, a first vendor may advertise that if a particular product is purchased, another product may be purchased from or given away by a second vendor.

A parent application of the present application, U.S. Patent Application
No. 09/219,267 entitled "METHOD AND APPARATUS FOR FACILITATING
ELECTRONIC COMMERCE THROUGH PROVIDING CROSS-BENEFITS
20 DURING A TRANSACTION", filed on December 23, 1998, discloses a method and apparatus that permits a customer that is purchasing items from a first vendor to receive

a benefit (e.g. a credit for the price of the items) from a second vendor. The present application provides further embodiments of this novel and beneficial invention.

SUMMARY OF THE INVENTION

5 It is an object of the present invention to provide a method and apparatus for facilitating commerce.

 In accordance with the present invention, a controller receives information relating to customer activity with a first vendor, typically via a Web page that a customer accesses. The controller further receives an indication of items (goods
10 and/or services) the customer desires to purchase, the items having an associated total price. The controller determines, based on any of various criteria, whether to provide an offer for a subsidy based on the information relating to customer activity. For example, a customer who places certain items in his virtual "shopping cart" may receive such an offer. The offer for a subsidy is from a second vendor (a subsidizing
15 vendor), and may define, for example, a reduction in the price charged for the item and an obligation for the customer to fulfill in exchange for the subsidy. For example, the customer may be obliged to sign up for a credit card or telephone service provided by the subsidizing vendor.

 An indication of the offer for the subsidy is provided to the customer,
20 e.g., via a text or graphical display on the Web page. The customer responds via known user interface techniques and, if he accepts the offer, he is charged a second price for the items. The second price is less than the total price, and may even be zero.

Thus the customer may get his desired items for free in exchange for fulfilling the obligation with the subsidizing vendor.

BRIEF DESCRIPTION OF THE DRAWINGS

5 FIG. 1A is a schematic illustration of an embodiment of an apparatus for facilitating commerce in accordance with the present invention.

 FIG. 1B is a schematic illustration of another embodiment of an apparatus for facilitating commerce in accordance with the present invention.

 FIG. 2 is a schematic illustration of a controller of the apparatus of FIG.

10 1.

 FIG. 3 is a schematic illustration of a vendor server of the apparatus of FIG. 1.

 FIG. 4 is a representation of a customer database of the controller of FIG. 2.

15 FIG. 5 is a representation of a vendor database of the controller of FIG.

2.

 FIG. 6 is a representation of a transaction database of the controller of FIG. 2.

 FIG. 7 is a representation of a subsidizer database of the controller of FIG. 2.

20 FIG. 2.

 FIG. 8 is a representation of an offer rules database of the controller of FIG. 2.

FIG. 9 is a representation of an offers database of the controller of FIG.

2.

FIG. 10 is a representation of a record of an offer summary database of the controller of FIG. 2.

5 FIG. 11 is a representation of a record of another embodiment of the offer summary database.

FIG. 12 is a schematic illustration of an item database of the vendor server of FIG. 3.

10 FIG. 13 is a flow chart illustrating an embodiment of a method for providing an offer for a benefit.

FIG. 14 is a flow chart illustrating an embodiment of a method for providing an offer for a benefit using offer rules.

15 FIGS. 15A and 15B are a flow chart illustrating an embodiment of a method for providing an offer which may be accepted by fulfilling an obligation associated with the offer.

FIG. 16 is a flow chart illustrating an embodiment of a method for determining whether customers have fulfilled their obligations associated with an offer for a benefit.

20 FIG. 17 is a flow chart illustrating an embodiment of a method for providing an offer for a benefit after a customer has made a purchase from a vendor.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Applicants have recognized that the acquisition budgets of various service providers may be advantageously used to facilitate commerce. A customer that purchases items from a first vendor may be paid, directly or indirectly, by a second vendor, so that the customer pays a reduced price, perhaps nothing at all, for his desired items. In exchange, the customer participates or agrees to participate in a transaction with the second vendor. For example, the customer may be required to sign up for a service that is provided by the second vendor. Since many service providers are willing to pay significant amounts of money (e.g. often \$50 to \$200) to acquire a new customer, the ability to acquire a customer by essentially "intervening" in a sale between others can benefit all parties involved. In short, the second vendor provides a subsidy to the customer. The customer is benefited by the reduced price of his items, the first vendor is benefited by the increased sales and customer satisfaction that such an arrangement would bring, and the second vendor is benefited by the additional transaction, particularly the acquisition of a new customer in one embodiment.

In addition, applicants have also recognized that various types of customer activities may be used to indicate, among other things, whether the customer is likely to accept an offer for a benefit from a subsidizing vendor. For example, when a customer begins to interact with a first vendor (e.g. via the first vendor's Web site), various types of customer activity may be used to indicate whether the customer is willing to transact with the first vendor. Similarly, various types of customer activity may be used to indicate whether the customer is willing to transact with a subsidizing

vendor. Detection of such customer activity can assist in identifying, e.g., which customers should be given offers for subsidies, and when.

Referring to FIG. 1A, an apparatus 100 includes a controller 110 that is in communication with a vendor server 120. The controller 110 and the vendor server 5 120 may comprise computers, such as those based on an Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of vendor servers may be in communication with the controller 110. Those skilled in the art will understand that devices in communication with each other need not be continually transmitting to each other. On the contrary, 10 such devices need only transmit to each other as necessary, and may actually refrain from exchanging data most of the time. For example, a device in communication with another device via the Internet may not transmit data to the other device for weeks at a time.

The vendor server 120 may be a "Web server" of a vendor (e.g. a retail 15 seller). A vendor server could then generate Web pages (documents on the World Wide Web that typically include an HTML file and associated graphics and script files) that may be accessed via the World Wide Web and allow purchases from the vendor to be made in a manner known in the art. A Web site consists of several such Web pages and associated databases served up by an HTTP server (e.g. the vendor server 120) on 20 the World Wide Web. Alternatively, the vendor server 120 may be a computer involved in operating a physical store. Such a computer, for example a point of sale

(POS) server, would perform such tasks as inventory management and transaction processing for the store.

The controller 110 is also in communication with a subsidizing vendor server 140. The subsidizing vendor server 140 may comprise a computer, such as those
5 based on an Intel® Pentium® microprocessor, that is adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of subsidizing vendor servers may be in communication with the controller 110.

The subsidizing vendor server 140 may be a "Web server" of a vendor. The subsidizing vendor server 140 could then generate a Web page that may be
10 accessed via the World Wide Web and allow transactions with the subsidizing vendor in a manner known in the art. Alternatively, the subsidizing vendor server 140 may be a computer involved in operating a physical store. Such a computer would perform such tasks as inventory management and transaction processing.

The vendor server 120 may be in communication with a customer
15 terminal 130 that transmits data regarding a customer transaction (e.g. a purchase). Any number of customer terminals may be in communication with the vendor server 120. The customer terminal 130 may be a point of sale (POS) terminal, such as the NCR 7454 manufactured by NCR Corporation or the IBM 4683 manufactured by International Business Machines. As is known in the art, POS terminals perform such
20 processes as calculating the total price of a purchase (goods or services) and calculating the amount of change due to a customer. POS terminals may furthermore track purchases made and adjust databases of inventory accordingly.

In another embodiment, the customer terminal 130 may be a computer, such as those based on an Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Such computers are able to appropriately access a Web page to communicate with a vendor server in a manner that is known to those skilled in the art.

In still other embodiments, the customer terminal 130 may be a telephone, an automated teller machine (ATM), slot machine, a vending machine or other device that receives payment from customers in exchange for providing goods or services. The vendor server in such an embodiment could include an IVRU (Interactive Voice Response Unit), such as the Vision 2001 or the Insight IVR/Web, both from Interactive Voice Technologies, Corp., or the OmniVox for Windows NT from APEX Voice Communications. An IVRU allows a user of a DTMF (Dual Tone Multi-Frequency) signal generating telephone to communicate with a computer. The DTMF signals received from the user's telephone are interpreted by the vendor server, and the vendor server may also communicate with the user by generating and transmitting voice or other audio signals, such as an list of IVRU menu options.

The use of the controller 110 is especially advantageous in an embodiment where a plurality of subsidizing vendors and/or a plurality of vendor servers serving customers participate in the described invention. A parent application, U.S. Patent Application No. 09/274,281 (attorney Docket No. 99-006) entitled "METHOD AND APPARATUS FOR PROVIDING CROSS-BENEFITS VIA A CENTRAL AUTHORITY", filed March 22, 1999, the entirety of which is incorporated

by reference herein as part of the present disclosure, discloses an invention utilizing such a controller.

Referring to FIG. 1B, an apparatus 150 represents another embodiment of an apparatus for facilitating commerce in accordance with the present invention.

5 Specifically, in the apparatus 150 a vendor server 160 communicates with a customer terminal 170 and with a subsidizing vendor server 180 without the intervening controller 110. Accordingly, the embodiment illustrated by FIG. 1B is appropriate for a direct relationship between the vendor servicing customers and the subsidizing vendor.

Referring to FIG. 2, reference numeral 200 indicates a device that may
10 be the controller 110 (FIG. 1A). In another embodiment, the functionality of the device 200 may be performed by another device, such as the vendor server 160 (FIG. 1B), which operates to provide a customer with an offer for a subsidy from a second vendor.

The device 200 comprises a processor 202, such as an Intel® Pentium® microprocessor. The processor 202 is in communication with a data storage device
15 210, such as an appropriate combination of magnetic, optical and/or semiconductor memory. For example, the data storage device 210 may comprise one or more of a ROM, RAM and hard disk. The processor 202 and the data storage device 210 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port
20 cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. In one embodiment, the controller 110 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

The data storage device 210 stores a program 220 for controlling the processor 202. The processor 202 performs instructions of the program 220, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 220 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 202 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 210 also stores (i) a customer database 230, (ii) a vendor database 240, (iii) a transaction database 250, (iv) a subsidizer database 260, (v) an offer rules database 270, (vi) an offers database 280 and (vii) an offer summary database 290. The databases 230, 240, 250, 260, 270, 280 and 290 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown. Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

FIG. 3 illustrates the vendor server 120 of FIG. 1A. As described above with reference to FIG. 1B, in one embodiment the vendor server may communicate with a subsidizing vendor server 180 without the intervening controller 110.

Accordingly, the description of the vendor server 120 is applicable to the vendor server 160 of FIG. 1B. In such an embodiment, the databases stored by the data storage device of the vendor server could include the databases depicted in FIGS. 2 and 3.

The vendor server 120 comprises a processor 302, such as an Intel® Pentium® microprocessor, which is in communication with a customer terminal 315 and the controller 110. The processor 302 is also in communication with a data storage device 310, such as an appropriate combination of magnetic, optical and/or semiconductor memory. For example, the data storage device 310 may comprise one or more of a ROM, RAM and hard disk. The processor 302 and the data storage device 310 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. In one embodiment, the vendor server 120 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

The data storage device 310 stores a program 320 for controlling the processor 302. The processor 302 performs instructions of the program 320, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 320 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 302 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 310 also stores (i) a customer database 330, (ii) an item database 340, and (iii) a transaction database 350. The customer database 330 and the transaction database 350 of the vendor server 120 may be similar or identical to the customer database 230 and transaction database 250 of the controller 110. For
5 example, the controller 110 may store data that is derived from the vendor server 120, and vice versa. If each vendor server stores data on its own customers and its own transactions, the controller 110 could aggregate this data from each vendor server.

The databases 330, 340 and 350 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by
10 those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown. Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will understand that the
15 number and content of the entries can be different from those illustrated herein.

Referring to FIG. 4, a table 400 represents an embodiment of the customer database 230 (FIG. 2) and/or the customer database 330 (FIG. 3). The table 400 includes entries 402, 404, 406 and 408, each defining a customer that may purchase items from a vendor. Such information may be determined, for example,
20 when a customer registers for a frequent shopper card. Those skilled in the art will understand that the table 400 may include any number of entries. The table 400 also defines fields for each of the entries 402, 404, 406 and 408. The fields specify (i) a

customer identifier 420 that uniquely identifies the customer, (ii) a name 422 of the customer, (iii) a billing address 424 of the customer, (iv) credit card information 426 which may be used to render payment in purchasing the items, and (v) an electronic mail ("e-mail") address 428 for communication with the customer.

5 For each entry of the table 400, the data specified by fields 422, 424, 426 and 428 may be received from the corresponding customer (e.g. via the corresponding customer terminal and/or vendor server that interacts with the customer). For example, the data may be provided when the customer makes a purchase from a vendor's Web site by requiring the customer to enter information into an HTML form
10 provided on a Web page. Upon registration of a new customer, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique customer identifier to store in the field 420 of the entry corresponding to the new customer. Once such information is stored for a customer, it may be retrieved upon reference to the appropriate customer identifier.

15 Referring to FIG. 5, a table 500 represents an embodiment of the vendor database 240 (FIG. 2). The table 500 includes entries 502, 504, 506 and 508, each defining a vendor that services customers and may have those customers receive offers for subsidies. Such information may be determined when a vendor registers for participation in the subsidizing program described herein. Those skilled in the art will
20 understand that the table 500 may include any number of entries. The table 500 also defines fields for each of the entries 502, 504, 506 and 508. The fields specify (i) a vendor identifier 520 that uniquely identifies the vendor, (ii) a vendor name 522, (iii) a

vendor e-mail address 524 for communication with the vendor, and (iv) an amount owed 526 to the vendor (e.g. promised but unpaid subsidy amounts).

For each entry of the table 500, the data specified by fields 522 and 524 may be received from the corresponding vendor (e.g. via the corresponding vendor server). For example, the data may be provided when the vendor registers with the controller 110 in the embodiment of FIG. 1A.. Upon registration of a new vendor, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique vendor identifier to store in the field 520 of the entry corresponding to the new vendor. Once such information is stored for a vendor, it may be retrieved upon reference to the appropriate vendor identifier.

Referring to FIG. 6, a table 600 represents an embodiment of the transaction database 250 (FIG. 2) and/or the transaction database 350 (FIG. 3). The table 600 includes entries 602, 604 and 606, each defining a transaction with a vendor server. Typically, the transaction includes a purchase of items by a customer. Those skilled in the art will understand that the table 600 may include any number of entries. The table 600 also defines fields for each of the entries 602, 604 and 606. The fields specify (i) a transaction identifier 620 that uniquely identifies the transaction, (ii) a time 622 of the transaction, (iii) the items ordered 624, (iv) credit card information 626 that may define a credit card account that was charged to pay for the items purchased, (v) an amount charged 628 for the items, (vi) a delivery address 630 for the items, and (vii) a customer identifier 632 (if any) that identifies the customer that made the purchase.

For each entry of the table 600, the data specified by fields 624, 626, 628, 630 and 632 may be received via the corresponding customer terminal. For example, the items ordered may be identified by being scanned by a bar code scanner that transmits a representative signal to a POS terminal. Alternatively, the items
5 ordered may have been selected by a customer via a Web page displayed by his personal computer. Other ways to indicate items the customer desires to purchase will be apparent to those skilled in the art. Similarly, the credit card information may be read by a credit card reader that transmits a representative signal to a POS terminal. Alternatively, the credit card information may be entered by a customer into a form on
10 a Web page displayed by his personal computer. Those skilled in the art will understand that other payment identifiers besides credit card information may be employed, such as debit card numbers, electronic cash identifiers. The use herein of a credit card as a means of payment is merely exemplary and not limiting on the scope of the present invention.

15 The data may be transmitted from the customer device to the controller 110 in the embodiment of FIG. 1A, or to the vendor server 160 in the embodiment of FIG. 1B. A unique transaction identifier may be generated and the time of the transaction may be recorded (e.g. with reference to a clock signal generated by the customer terminal, vendor server, controller or other device). The transaction identifier
20 and the time are stored in the fields 620 and 622 respectively of the entry corresponding to the new transaction. Once such information is stored for a transaction, it may be retrieved upon reference to the appropriate transaction identifier.

Referring to FIG. 7, a table 700 represents an embodiment of the subsidizer database 260 (FIG. 2). The table 700 includes entries 702, 704 and 706, each defining a subsidizing vendor that may subsidize purchases. Such information may be determined when a subsidizing vendor registers for participation in the

5 subsidizing program described herein. Those skilled in the art will understand that the table 700 may include any number of entries. The table 700 also defines fields for each of the entries 702, 704 and 706. The fields specify (i) a subsidizing vendor identifier 720 that uniquely identifies the subsidizing vendor, (ii) a name 722 of the subsidizing vendor, (iii) an account 724 used to pay for the subsidies, (iv) an amount owed 726 by

10 the subsidizing vendor, and (v) a rank 728 used to prioritize subsidizing vendors and/or subsidies from those subsidizing vendors. The ranks may be established periodically (e.g. once per year) based on various criteria. For example, the ranks may be adjusted dynamically based on the acceptance rates of offers from the subsidizing vendors and/or amount of funds the subsidizing vendors have provided in connection with their

15 offers.

For each entry of the table 700, the data specified by fields 722 and 724 may be received from the corresponding subsidizing vendor (e.g. via the corresponding vendor server). For example, the data may be provided when the subsidizing vendor registers with the controller 110 in the embodiment of FIG. 1A, or with the vendor

20 server 160 in the embodiment of FIG. 1B. Upon registration of a new subsidizing vendor, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique subsidizing vendor identifier to

store in the field 720 of the entry corresponding to the new subsidizing vendor. The amount owed is calculated and updated for each subsidizing vendor. Typically, the amount owed is updated when an offer from a particular subsidizing vendor is accepted by a customer. The rank of each subsidizing vendor is updated according to a ranking
5 scheme. For example, subsidizing vendors may pay for a preferential rank, and/or rank may be determined by the number (or percentage) of corresponding offers that are accepted. Once such information is stored for a subsidizing vendor, it may be retrieved upon reference to the appropriate subsidizing vendor identifier.

Referring to FIG. 8, a table 800 represents an embodiment of the offer
10 rules database 270 (FIG. 2). The table 800 includes entries 802, 804, 806, 808 and 810, each defining, among other things, an offer rule. When an offer rule is satisfied during a transaction, the vendor provides an offer for a specified benefit, such as a subsidy. Such information may be determined when a subsidizing vendor registers for participation in the subsidizing program described herein. Those skilled in the art will
15 understand that the table 800 may include any number of entries. The table 800 also defines fields for each of the entries 802, 804, 806, 808 and 810. The fields specify (i) an offer rule identifier 820 that uniquely identifies the offer rule, (ii) a subsidizing vendor identifier 822 that uniquely identifies the subsidizing vendor, (iii) customer activity 824 that is required in order for an offer to be provided, (iv) a subsidy amount
20 826, (v) when the offer rule is effective 828 (i.e. other requirements in order to satisfy the offer rule), and (vi) an additional transaction 830 that is required of the customer in

exchange for the subsidy. As described below, several types of transactions, such as additional purchases or initiating service agreements, may be required of the customer.

Some types of customer activity in a Web embodiment include a mouse click on a predetermined portion of a Web page, on a predetermined banner

5 advertisement, and on an indication of an item. Similarly, a mouse-over (indication of cursor location and/or movement) on a predetermined portion of a Web page and on predetermined portions of Web pages at least a predetermined number of times may be desirable customer activities. Such customer activity can indicate, for example, that the customer is evaluating particular products on the Web site by clicking on particular
10 links or placing the cursor over the links.

Some other types of customer activity in a Web embodiment include performing a search for a predetermined item, opening or accessing an electronic cash account (e.g. an e-cash "wallet"), accessing predetermined Web pages, a predetermined number of predetermined Web pages, predetermined Web pages in a predetermined
15 sequence, or predetermined Web pages during a predetermined time period; a duration that the Web site is open; and previous access to a predetermined Web site at least a predetermined number of times.

Other types of customer activity include a predetermined number of
20 items that a customer is ready to purchase from a vendor (indicated, for example, by the content of the customer's virtual shopping cart), one or more predetermined items that the customer is ready to purchase from a vendor, a duration that an item is selected for

purchase, requesting a coupon for a predetermined item, an item having at least a predetermined price that the customer is ready to purchase from the first vendor, at least a predetermined number of previous purchases from the first vendor, and frequent shopper status of the customer.

5 For each entry of the table 800, the data specified by fields 824, 826, 828 and 830 may be received from the corresponding subsidizing vendor (e.g. via the corresponding subsidizing vendor server) for each offer rule the subsidizing vendor establishes. For example, the data may be provided when the subsidizing vendor registers with the controller 110 in the embodiment of FIG. 1A, or with the vendor
10 server 160 in the embodiment of FIG. 1B. Upon creation of an offer rule, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique offer rule identifier to store in the field 820 of the entry corresponding to the new offer rule. The corresponding subsidizing vendor identifier would also be stored in the field 822. Once such information is stored for an offer rule,
15 it may be retrieved upon reference to the appropriate offer rule identifier.

 The customer activity that is required in order for an offer to be provided may be set by the subsidizing vendor. Alternatively, the required customer activity may be set by the controller 110 for each subsidizing vendor. For example, the subsidizing vendor may be unable to decide which type of customer activity should be
20 required. In still another embodiment, the required customer activity may be set and thereafter dynamically adjusted based on acceptance rates of provided offers.

Referring to FIG. 9, a table 900 represents an embodiment of the offers database 280 (FIG. 2). The table 900 includes entries 902, 904, 906, 908 and 910, each defining an offer for a subsidy. The offer was provided to a customer during a transaction of the customer with the vendor. Those skilled in the art will understand that the table 900 may include any number of entries. The table 900 also defines fields for each of the entries 902, 904, 906, 908 and 910. The fields specify (i) an offer identifier 920 that uniquely identifies the offer, (ii) a transaction identifier 922 that uniquely identifies the transaction during which the offer was provided, (iii) a subsidizing vendor identifier 924 that uniquely identifies the subsidizing vendor, (iv) an identifier of an offer rule 926 that was applied during the transaction, (v) when the offer was provided 928, (vi) an expiration date 930 (if any) for the offer, (vii) a subsidy amount 932, (viii) a total price 934 that the customer would have to pay without the subsidy, (ix) a total price 936 that the customer would have to pay with the subsidy, and (x) when the offer was accepted 938 (if it was accepted). As described above with reference to FIG. 8, offer rules define specific subsidies. Thus, the identifier of an offer rule stored in field 926 may be used to determine a corresponding subsidy amount.

The subsidy amount may be a fixed amount, such as \$50. The subsidy amount may further be dependent on various criteria such as the purchase total. For example, the subsidy amount could be for the lesser of the purchase total and \$50.

Similarly, the subsidy amount could be for the lesser of a portion of the purchase total and \$50. For example, the subsidy amount could be for the lesser of \$50 and half the purchase total.

For each entry of the table 900, the data specified by fields 928, 934, 936 and 938 may be received from the corresponding customer terminal for each offer that has been provided. For example, when the offer is provided a new entry of the table 900 may be created. At that time, the date and time that the offer was provided may be recorded (e.g. with reference to a clock signal generated by the customer terminal, vendor server, controller or other device), and the total price and the total price with the subsidy amount may be received, e.g., from the POS terminal. The field 938 of the new entry would initially be set to "open" to indicate that the offer is open (not yet accepted or rejected). Field 922, 924 and 926 of the new entry would be set to the appropriate identifiers. Field 930 could be calculated from the field 928 (e.g. a predetermined time after the time in field 928 or "none" if there is no desired expiration date). Field 932 is determined from the corresponding offer rule applied, as described above with respect to field 826. Upon creation of an entry in the table 900, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique offer identifier to store in the field 920. Once such information is stored for an offer, it may be retrieved upon reference to the appropriate offer rule identifier. The field 938 may be updated when an offer is rejected or accepted.

Referring to FIG. 10, a table 1000 represents a record of an embodiment of the offer summary database 290 (FIG. 2). The offer summary database 290 typically includes a plurality of records, each defining a summary of offers for subsidies that have been provided on behalf of a particular subsidizing vendor. The table 1000

includes a subsidizing vendor identifier 1002 that uniquely identifies the subsidizing vendor, a total number of offers provided 1004 on behalf of the subsidizing vendor, a total number of those offers that were accepted 1006, and a total amount 1008 of the subsidies due in connection with accepted offers.

5 The table 1000 also includes entries 1010 and 1012, each defining offers provided due to satisfaction of an offer rule of the subsidizing vendor. Those skilled in the art will understand that the table 1000 may include any number of entries. The table 1000 also defines fields for each of the entries 1010 and 1012. The fields specify (i) an offer rule identifier 1020 that uniquely identifies the offer rule, (ii) a number 1022
10 of offers provided due to the offer rule, (iii) a number 1024 of these offers that were accepted, and (iv) an amount 1026 of the subsidies due in connection with these accepted offers. If desirable, the information stored in the offer summary database 290 (FIG. 2) may be organized by the vendor through which the offer was provided. Such an embodiment would allow a comparison of the acceptance rate of offers at different
15 vendors.

For each subsidizing vendor, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would create a record such as the record 1000 and store the subsidizing vendor identifier 1002. For each offer rule associated with the subsidizing vendor, a corresponding entry is created and the
20 offer rule identifier is stored in field 1020. For each entry in the record, the data specified by fields 1022, 1024 and 1026 may be adjusted as offers are provided and acceptances of the offers are received. For example, when an offer is provided, the

corresponding offer rule is identified and thus the corresponding entry is identified. The field 1022 of that entry is increased by one to reflect the newly-provided offer. Similarly, when an offer is accepted, field 1024 of that entry is increased by one to reflect the new acceptance and the amount of the subsidy associated with the accepted offer is added to the field 1026 of the entry.

The sum of the number of offers indicated by the field 1022 for all entries is stored as the total number of offers 1004 for the corresponding record. Similarly, the number of offers accepted indicated by the field 1024 for all entries is stored as the total number of offers accepted 1006 for the corresponding record, and the sum of the amounts indicated by the field 1026 for all entries is stored as the total amount 1008 for the corresponding record. Once such information is stored for a subsidizing vendor, it may be retrieved upon reference to the appropriate subsidizing vendor identifier. Accordingly, information for, e.g., account reconciliation for each subsidizing vendor may be derived from such information.

Referring to FIG. 11, a table 1100 represents a record of another embodiment of the offer summary database 290 (FIG. 2). In the illustrated embodiment, information is organized by offer rule. In one embodiment, for each offer rule various types of customer activity may have been required. The results of each type of customer activity are summarized in the record.

Various types of customer activity may be required for an offer rule in order to test which customer activities are relatively successful in soliciting an acceptance of an offer. For example, every hour a different customer activity may be

required in order for an offer to be provided in accordance with the offer rule. In such an embodiment, each hour the controller 110 (FIG. 1A) may update the customer activity field 824 of an entry of the offer rules database 270 to reflect the new customer activity that is required. The most successful customer activity requirement may then

5 be used in the future.

The offer summary database 290 can include a plurality of records, each defining a summary of offers for subsidies that have been provided in response to a customer activity in accordance with the offer rule. The table 1100 includes an offer rule identifier 1102 that uniquely identifies the offer rule. The table 1100 also includes
10 entries 1104, 1106 and 1108. Each entry defines offers provided in accordance with the offer rule and upon certain customer activity. Those skilled in the art will understand that the table 1100 may include any number of entries. The table 1100 also defines fields for each of the entries 1104, 1106 and 1108. The fields specify (i) customer activity 1120 required for the offer, (ii) a number 1122 of offers provided due to the
15 particular customer activity for the offer rule, (iii) a number 1124 of these offers that were accepted, and (iv) an acceptance rate 1126 (the ratio of offers accepted to number of offers provided). If desirable, the information stored in the offer summary database 290 (FIG. 2) may be organized according to other information.

For each offer rule, the controller 110 in the embodiment of FIG. 1A, or
20 the vendor server 160 in the embodiment of FIG. 1B, would create a record such as the record 1100 and store the offer rule identifier 1102. For each customer activity that was or is associated with the offer rule, a corresponding entry is created and an

indication of the customer activity is stored in field 1120. For each entry in the record, the data specified by fields 1122, 1124 and 1126 may be adjusted as offers are provided and acceptances of the offers are received. For example, when an offer is provided in response to a particular customer activity, the corresponding entry is identified. The

5 field 1122 of that entry is increased by one to reflect the newly-provided offer.

Similarly, when an offer is accepted, field 1124 of that entry is increased by one to reflect the new acceptance and the acceptance rate is calculated and stored in the field 1126 of the entry. Once such information is stored for an offer rule, it may be retrieved upon reference to the appropriate offer rule identifier.

10 Referring to FIG. 12, a table 1200 represents an embodiment of the item database 340 (FIG. 3). The table 1200 includes entries 1202 and 1204, each defining an item sold via a vendor server. Those skilled in the art will understand that the table 1200 may include any number of entries. The table 1200 also defines fields for each of the entries 1202 and 1204. The fields specify (i) a item identifier 1220 that uniquely
15 identifies the item, (ii) an item description 1222, (iii) an item price 1224 for which the item is typically sold, and (iv) an availability 1226 of the item which may be based on an inventory level of the item.

For each entry of the table 1200, the data specified by fields 1222, 1224 and 1226 may be received from the corresponding vendor. For example, the data may
20 be provided when a vendor prepares to sell the item. Upon the entering of a new item, the vendor server would generate a unique customer identifier to store in the field 1220

of the entry corresponding to the new item. Once such information is stored for an item, it may be retrieved upon reference to the appropriate item identifier.

Referring to FIG. 13, a flow chart 1300 illustrates an embodiment of a method for providing an offer for a benefit (e.g. a reduced price) to a customer that is to purchase items from a vendor. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

Information relating to customer activity of a customer with a first vendor is received (step 1302). Such information may be received via a Web server, for example, in an embodiment where a vendor sells via the Internet. The Web server, which may be the vendor server, may receive data from the customer terminal that indicates, for example, hyperlinks that the customer clicks on, buttons that the customer actuates, or mouse movements of the customer terminal.

The information may be received from a "cookie" stored on the customer terminal (e.g. on a personal computer of the customer). Such a cookie is a block of data that a Web server (e.g. the vendor server) stores on a client system (e.g. a customer terminal). When a user returns to the same Web site, the browser of the customer terminal sends a copy of the cookie back to the Web server. Cookies may be used to identify users of the customer terminal, to instruct the Web server to send a customized version of a Web page, to submit account information for the user, and for other administrative purposes.

The information may be received via a telephone, for example, in an embodiment where a vendor sells via an IVRU. The information may also be received via a POS terminal, for example, in an embodiment where a vendor sells at a retail store. The POS terminal receives data such as UPC codes that identify items scanned
5 with a bar code scanner, prices of those items, and information received from a customer's frequent shopper card. Similarly, the information may be received via a device, such as a PDA (Personal Digital Assistant) or a scanner mounted on a shopping cart, that the customer uses to indicate the items he has selected for purchase or the items in which he is otherwise interested.

10 The information may also be received via a sensor that senses the presence or location of a customer. For example, infrared or pressure sensors may be disposed in a store and operable to sense when a customer is near particular products or areas.

The information may also be received via a device that scans items with
15 a bar code scanner and provides the prices of those items that are scanned. Such devices are known and are frequently disposed in supermarkets to allow customers to determine the prices of items, especially items that are on sale or otherwise subject to special pricing.

It is then determined whether an offer for a subsidy should be provided
20 (step 1304). In one embodiment, the information relating to customer activity dictates whether the offer is provided. For example, as described in detail below there may be one or more rules specifying customer activity that is required. If an offer should not

be provided, then the controller 110 interacts with the customer conventionally (step 1306).

Otherwise, an offer for a subsidy from a second vendor is determined (step 1308). For example, in an embodiment where one or more rules are included, if a rule is satisfied a corresponding offer for a subsidy is provided. An indication of the offer (or offers) is provided to the customer (step 1310). For example, text and/or images may be displayed on a Web page that is displayed on the customer terminal, text may be displayed on a monitor of a POS terminal, or an audio signal may be transmitted via an IVRU to a telephone.

The indication of the offer may be provided via a device, such as a PDA (Personal Digital Assistant) or a display mounted on a shopping cart of the customer, that accompanies the customer as he browses a store. Similarly, a display disposed in a particular location in the store (e.g. below a product display) may provide an offer to a customer that is near particular products or areas.

The indication of the offer may be provided via a device that scans items with a bar code scanner and provides the prices of those items scanned. In one embodiment, such a device could display an offer upon scanning the bar code of an item.

The offer typically specifies a subsidy amount and an obligation to fulfill in exchange for the subsidy. For example, an additional transaction may be required of the customer. In an embodiment where the second vendor provides services, the customer may be required to sign up for a service that is provided by the

second vendor (e.g. initiate a service agreement with the second vendor). The customer may be required to switch from a current service provider to the second vendor, so that the service will no longer be provided by the current service provider.

Examples of services include telephone service, Internet service,

5 banking services, credit card account services, insurance service, securities trading service, utilities service, satellite television service, or cable television service.

Telephone service can include long distance service such as is provided by Sprint Communications Company, L.P or wireless service such as is provided by AT & T.

Signing up for banking services may include the requirement to transfer a particular
10 minimum balance to a new bank account. Signing up for credit card account services may similarly include the requirement to apply for a credit card account and/or transfer a particular minimum balance to a new or existing credit card account. Signing up for securities trading services may include the requirement to open an account with a particular minimum balance amount.

15 The controller 110 receives an indication of items the customer desires to purchase (step 1312). For example, the items may have been scanned by a bar code scanner and thus identified by a POS terminal. Alternatively, the items may have been selected by a customer via a Web page and put in a virtual "shopping cart". Other ways to indicate items the customer desires to purchase will be apparent to those skilled in
20 the art.

The controller 110 also receives a response to the offer from the customer terminal (step 1314). The customer may indicate his response by, for

example, clicking a button on a Web page, actuating particular keys on a touch-tone telephone, actuating a button on a keypad in communication with a POS terminal, or verbally responding to a cashier that actuates buttons on the POS terminal.

If the response does not indicate an acceptance of the offer (step 1316),
5 then the controller 110 interacts with the customer conventionally (step 1306).
Otherwise, the offer is accepted and the customer is charged a lower price for the items than he otherwise would have been charged (step 1318). The customer may even get the items for free or receive a credit (e.g. money back or store credit). In another embodiment, the benefit to the customer may be different than a reduced price on the
10 items he desires to purchase. For example, the customer may be given a product upgrade to another (higher value) item or the customer may be given an additional item at a discount or for free. The customer may also be provided with cash, store credit or other monetary award.

The customer may be charged the lower price in single transaction. For
15 example, if an item is normally sold for \$80, but is sold to a particular customer for \$60 in connection with an offer for a subsidy, a credit card account of the customer may be charged \$60 in one transaction. Alternatively, the customer's credit card account may be charged \$80, and then subsequently credited for \$20 ($\$20 = \$80 - \60).

Referring to FIG. 14, a flow chart 1400 illustrates an embodiment of a
20 method for providing an offer for a benefit to a customer that is to purchase items from a vendor. In particular, in the illustrated embodiment one or more rules determine which offers (if any) are provided to a customer. Although the illustrated method is

described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

Information relating to customer activity of a customer with a first
5 vendor is received (step 1402), as described above. The controller selects an offer rule to evaluate against the customer activity (step 1404). The rule may be defined by and selected from the offer rules database 270 (FIG. 2). For example, referring again to FIG. 8, each entry of the table 800 defines an offer rule. Accordingly, the controller 110 may select an entry of the offer rules database 270 (e.g. starting with the first
10 entry).

As described above, each offer rule includes customer activity that is required in order for an offer to be provided. Accordingly, the received information relating to customer activity may be compared with the customer activity that is required by the offer rule (step 1406). If the customer activity does not satisfy the offer
15 rule, then it is determined whether there are more offer rules that have not yet been so compared to the received information (step 1408). If there are not any more offer rules, then the controller 110 interacts conventionally with the customer (step 1410).

If there are more offer rules, then another offer rule is selected (step 1404). For example, the next entry in the offer rules database 270 may be selected.
20 Those skilled in the art will realize that the offer rules need not be selected according to the sequence defined by the offer rules database 270.

If the customer activity does satisfy the offer rule, then the controller 110 determines if the offer rule is otherwise effective (step 1412). For example, referring to FIG. 8, each entry of the table 800 defines other requirements necessary in order to satisfy the offer rule (i.e. the field 828). If the rule is not otherwise effective (i.e. the other requirements are not satisfied), then it is determined whether there are more offer rules that have not yet been so compared to the received information (step 1408). If there are not any more offer rules, then the controller 110 interacts conventionally with the customer (step 1410). Otherwise, another offer rule is selected (step 1404).

If the offer rule is otherwise effective, then the controller 110 generates an offer (step 1414). The offer indicates the subsidy amount (specified by the field 826 of the corresponding entry) and an additional transaction required (specified by the field 830 of the corresponding entry). An indication of the offer is provided to the customer (step 1416), as described above. If there any more offer rules, then they are in turn selected and evaluated as described above.

The illustrated method allows one or more offers to be provided to a customer. The customer may in turn accept an offer as described above. In particular, if a plurality of offers are provided to the customer substantially simultaneously, the customer may be asked to select one (or more) of the plurality, and the selection would indicate an acceptance of the selected offer. Alternatively, if a plurality of offers are provided sequentially (i.e. another offer is provided if a prior offer is not accepted),

then the sequence of the offers may be defined by, for example, the ranks of the corresponding subsidizing vendors.

Referring to FIGS. 15A and 15B, a flow chart 1500 illustrates an embodiment of a method for providing an offer for a benefit to a customer that is to purchase items from a vendor. In particular, in the illustrated embodiment a customer receives a subsidy subject to an obligation. The customer may receive an immediate benefit in exchange for participating or agreeing to participate in a transaction with the second vendor. For example, the customer may be required to participate in a future transaction with the second vendor. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

Information relating to customer activity of a customer with a first vendor is received (step 1502). It is then determined whether an offer for a subsidy should be provided (step 1504). If an offer should not be provided, then the controller 110 interacts with the customer conventionally (step 1506). Otherwise, an offer for a subsidy from a second vendor is determined (step 1508). For example, the information relating to customer activity may satisfy a rule, and the rule in turn specifies an offer. The controller 110 provides an indication of the offer (including its associated obligation) to the customer (step 1510).

The controller 110 receives an indication of items the customer desires to purchase (step 1512). The controller 110 also receives a credit card account

identifier (step 1514), such as a credit card number. The credit card account identifier may be received, for example, via a credit card authorization terminal that is in communication with a POS terminal, as is known to those skilled in the art.

The credit card account is charged a lower price for the items than
5 otherwise would have been charged (step 1516). The customer may even get the items for free. The controller 110 determines whether the customer has fulfilled the obligation of the offer (step 1518). For example, the obligation could be a requirement to sign up for a service provided by the second vendor. In such an embodiment, the second vendor may provide, for example, telephone service, Internet service, banking
10 services, credit card account services, insurance service, securities trading service, satellite television service, or cable television service. The obligation may further include a requirement that the service be maintained for a particular amount of time.

In some embodiments, the customer may have been required to fulfill the obligation before his credit card account is charged. For example, the customer
15 may have been required to fill out a credit card application before completing the purchase of his items. In other embodiments, the obligation may be need to be fulfilled at still other times.

The controller 110 can access a list of new or existing customers to determine whether the customer has fulfilled his obligation by signing up (and therefore
20 becoming a new customer). The controller 110 could access such a list periodically (e.g. every week) or upon demand (e.g. the controller receives the names of new customers as they become available). Alternatively, the controller 110 could query the

subsidizing vendor server, and in response receive a signal that indicates whether the customer had signed up for service from the second vendor. Similarly, the customer could be required to switch service providers from another service provider to the second vendor.

5 If the customer has fulfilled the obligation, then the controller 110 records the time and date the obligation was fulfilled (step 1520). The time and date may be stored, for example, in the field 938 of the entry corresponding to the offer. In such an embodiment, fulfilling the obligation may be considered acceptance of the offer.

10 If the customer has not fulfilled the obligation, then it is determined whether the offer has expired (step 1522). The expiration date and time of an offer is indicated by the field 930 of the offers database 280 (FIG. 2), and may be calculated based on the time the offer was provided. If the offer has expired without the obligation being fulfilled, the credit card account of the customer is charged for the
15 difference between the item price and the lower price previously charged (step 1524). This step assesses a penalty against the customer by removing the benefit that was previously provided to the customer if the customer does not fulfill the obligation within the allotted time. For example, if the credit card account was previously charged \$80 (in one or more transactions) in step 1516 for a \$95 item, then in step 1524 the
20 credit card account is charged \$15 ($\$15 = \$95 - \80). Thus, if the obligation is not fulfilled, the credit card account is charged \$95 in total (\$80 and \$15), which is the conventional price for the item. An even larger amount may be charged (i.e. greater

than \$15 in the above example) if desired to deter customers from reneging on the obligation.

Referring to FIG. 16, a flow chart 1600 illustrates an embodiment of a method for determining whether customers have fulfilled their obligations associated with an offer for a benefit. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

In the illustrated embodiment the obligation is to become a new customer of a subsidizing vendor. For example, the customer may have been obliged to initiate a new service agreement so that a particular service is provided to the customer by the subsidizing vendor. Those skilled in the art will understand the various modifications required in embodiments with other types of obligations.

The controller 110 selects a customer from a list of new customers (step 1602) of the subsidizing vendor. The list of new customers may be generated by the subsidizing vendor and transmitted to the controller 110 periodically (e.g. every week) or upon request. Such a list may be compiled by the subsidizing vendor as customers sign up for service and/or complete prerequisites for becoming a customer. Customers may be selected from the list, for example, in the order that they signed up during a predetermined period of time.

The controller 110 then determines if the selected customer has been offered a subsidy (step 1604). The controller may determine whether the selected

customer is represented in any entry of the offers database 280. For example, referring again to FIG. 9, each entry of the table 900 includes in field 922 an indication of the transaction during which the offer was provided. The corresponding entry of the transaction database 250 in turn indicates a customer identifier (e.g. the field 632 of the table 600). If the selected customer has not been offered a subsidy, then the controller 110 determines whether there are more customers that have not yet been selected (step 1610). Another customer is selected (step 1602) as long as there are more customers in the list that have not been selected.

If the selected customer has been offered a subsidy, the controller 110 determines if the offer for the subsidy included an obligation to become a customer of the subsidizing vendor (step 1606). For example, referring again to FIG. 9, each entry of the table 900 includes in field 926 an indication of the offer rule applied during the transaction. The corresponding entry of the offer rules database 270 in turn indicates an additional transaction required of the customer (e.g. in the field 830 of the table 800). Thus, the controller 110 determines whether the presence of the selected customer on the list of new customers indicates fulfillment of a previous obligation.

If the offer for the subsidy included an obligation to become a customer of the subsidizing vendor, then the controller 110 records that the selected customer has fulfilled his obligation (step 1608). For example, the time and date that the customer became a new customer of the subsidizing vendor may be recorded in the field 938 of the corresponding entry of the table 900. Then additional customers, if any, are selected and processed similarly (e.g., steps 1610 and 1602). Customers that have not

fulfilled their respective obligations may eventually be penalized in some manner, for example, by charging their credit card accounts a penalty fee amount.

In contrast to the above-described method, the controller 100 could search a list of customers that have accepted offers, rather than a list of new customers, in order to determine whether those customers have become new customers of the specified vendor.

Referring to FIG. 17, a flow chart 1700 illustrates an embodiment of a method for providing an offer for a benefit after a customer has made a purchase from a first vendor. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed by the vendor server 160 in the embodiment of FIG. 1B.

The controller 110 selects a customer from the list of customers that have purchased from the first vendor (step 1702). For example, as is known in the art the first vendor may record the name, address, telephone number and/or e-mail address of each customer that purchases items within a predetermined time period (e.g. each month). The customer selected from the list may be, for example, the first customer that purchased items during a predetermined period of time. When a customer makes a purchase, the vendor server may determine if contact information of the customer is stored. For example, the vendor server may determine whether the customer is a member of a frequent shopper program (in which contact information is typically obtained upon registration). Alternatively, it may be determined whether the customer filled in a form on a Web page that requests contact information. If contact information

of the customer is not stored, the vendor server can then request contact information of the customer, and wait for the customer to provide that contact information.

The controller then determines whether the selected customer should be provided an offer for a subsidy (step 1704) from a second vendor, as described above.

- 5 If the customer should not be provided with an offer for a subsidy, then the controller determines whether there are more customers on the list (step 1708). If so, then another customer is selected (step 1702).

If the customer should be provided with an offer for a subsidy, then the controller 110 provides an indication of the offer for a subsidy to the selected customer
10 using contact information of the customer (step 1706). The indication of an offer may be provided, for example, via e-mail, postal mail, and/or telephone. For example, the controller 110 may generate a textual message specifying the offer, and then transmit that message via e-mail to an e-mail address of the customer. The controller 110 may also generate a textual message which is printed onto a sheet of paper, and a postal mail
15 address which is printed onto a mailing label. The mailing label is used in directing the sheet of paper to the customer via conventional postal mail. For example, the offer may be provided on a credit card billing statement of the customer. The controller 110 may also generate an audio message which is transmitted via a telephone to the customer by connecting to the appropriate telephone number.

- 20 Although the present invention has been described with respect to a preferred embodiment thereof, those skilled in the art will note that various substitutions may be made to those embodiments described herein without departing

from the spirit and scope of the present invention. For example, although in many of the described embodiments above the benefit provided to the customer is a subsidy, there are many other types of benefits which are contemplated by the present invention.

What is claimed is:

1. A method, comprising the steps of:

receiving information relating to customer activity of a customer with a first vendor;

5 providing, in response to the received information, an indication of an offer for a subsidy from a second vendor;

receiving an indication of at least one item the customer desires to purchase, the at least one item having an associated total price; and

10 charging the customer a second price for the at least one item if the offer is accepted, the second price being less than the total price.

2. The method of claim 1, in which the step of receiving information relating to customer activity comprises:

reading information from a cookie.

3. The method of claim 1, in which the step of receiving information relating to customer activity comprises:

15 receiving information via at least one of a Web server, a telephone and a POS terminal.

4. The method of claim 1, wherein the indication of an offer for a subsidy is provided via at least one of e-mail, postal mail, and telephone.

5. The method of claim 1, in which the step of charging the customer the second price for the at least one item comprises:

5 charging the customer the total price; and
crediting an amount of funds to an account, the amount of funds being based on a difference between the total price and the second price.

6. The method of claim 5, in which the step of crediting is performed after the step of charging the total price.

10 7. The method of claim 5, in which the step of crediting comprises:
crediting the amount of funds to a credit card account.

8. The method of claim 1, in which the step of charging the customer the second price for the at least one item comprises:

charging the second price to an account in one transaction.

15 9. The method of claim 1, further comprising:
determining whether to provide an offer for a subsidy based on the information relating to customer activity.

10. The method of claim 9, in which the step of determining whether to provide an offer for a subsidy based on the information relating to customer activity comprises:

determining if the information relating to customer activity satisfies at least one rule.

5 11. The method of claim 1, further comprising:

determining if the information relating to customer activity satisfies at least one rule.

12. The method of claim 11, in which the step of providing, in response to the received indication, an indication of an offer for a subsidy is performed if the

10 information relating to customer activity satisfies at least one rule.

13. The method of claim 1, further comprising:

determining an offer for a subsidy from the second vendor based on the information relating to customer activity.

14. The method of claim 13, further comprising:

15 determining an offer for a subsidy from the second vendor based on a rule and the information relating to customer activity.

15. The method of claim 1, further comprising:

determining an offer for a subsidy from the second vendor if the information indicates a willingness to transact.

16. The method of claim 1, further comprising:

5 receiving a response to the offer.

17. The method of claim 16, further comprising:

determining whether the response was received within a predetermined period of time.

18. The method of claim 17, in which the step of charging is performed only if the

10 response indicates acceptance of the offer and if the response was received within the predetermined period of time.

19. The method of claim 17, in which the predetermined period of time is a

predetermined amount of time after the indication of an offer was provided.

20. The method of claim 16, in which the step of charging is performed only if the

15 response indicates acceptance of the offer.

21. The method of claim 1, in which the offer for the subsidy defines an obligation for the customer to fulfill in exchange for the subsidy; and further comprising:

receiving an indication that the customer has fulfilled the obligation.

22. The method of claim 21, in which the step of receiving an indication that the customer has fulfilled the obligation comprises:

receiving an indication that the customer has switched service providers.

23. The method of claim 21, in which the step of receiving an indication that the customer has switched service providers comprises:

determining a new customer of the second vendor; and

determining if the new customer had been offered a subsidy.

24. The method of claim 1, further comprising:

switching providers of a service that is provided to the customer.

25. The method of claim 24, in which the service comprises at least one of:

telephone service, Internet service, banking services, credit card account

services, insurance service, securities trading service, utilities service, satellite television service, and cable television service.

26. The method of claim 1, further comprising:

initiating a new service agreement so that a particular service is provided to the customer by the second vendor.

27. The method of claim 26, in which the service comprises at least one of:
telephone service, Internet service, banking services, credit card account

5 services, insurance service, securities trading service, utilities service, satellite television service, and cable television service.

28. The method of claim 1, further comprising:
facilitating a transaction between the customer and the second vendor.

29. The method of claim 1, further comprising:
10 soliciting agreement by the customer to participate in a transaction with the second vendor.

30. The method of claim 29, further comprising:
determining whether the customer participated in a transaction with the second vendor.

15 31. The method of claim 29, further comprising:
assessing a penalty if the customer did not participate in the transaction.

32. The method of claim 1, in which the information relating to customer activity comprises an indication of at least one of:

a mouse click on a predetermined portion of a Web page;

a mouse click on a predetermined banner advertisement;

5 a mouse click on an indication of an item;

a mouse-over on a predetermined portion of a Web page; and

mouse-overs on predetermined portions of Web pages at least a predetermined number of times.

33. The method of claim 1, in which the information relating to customer activity
10 comprises an indication of at least one of:

a search that is performed for a predetermined product;

accessing predetermined Web pages;

accessing a predetermined number of predetermined Web pages;

accessing predetermined Web pages in a predetermined sequence;

15 accessing predetermined Web pages during a predetermined time period;

a duration that the Web site is open; and

previous access to a predetermined Web site at least a predetermined number of times.

34. The method of claim 1, in which the information relating to customer activity
20 comprises an indication of at least one of:

a predetermined number of items that a customer is ready to purchase from the first vendor;

a predetermined item that the customer is ready to purchase from the first vendor;

5 a duration that an item is selected for purchase;

requesting a coupon for a predetermined item;

an item having at least a predetermined price that the customer is ready to purchase from the first vendor;

at least a predetermined number of previous purchases from the first vendor;

10 and

frequent shopper status of the customer.

35. The method of claim 1, in which the offer defines at least one of:

a reduction in the price charged for the at least one item;

the second vendor; and

15 an obligation for the customer to fulfill in exchange for the subsidy.

36. A method, comprising the steps of:

receiving information relating to customer activity with a first vendor;

determining whether to provide an offer for a subsidy based on the information relating to customer activity;

20 determining an offer for a subsidy from a second vendor;

providing an indication of the offer for the subsidy from the second vendor;
receiving a response to the offer;
receiving an indication of at least one item the customer desires to purchase, the
at least one item having an associated total price; and

5 charging the customer a second price for the at least one item if the response
indicates that the offer is accepted, the second price being less than the total price.

37. A method, comprising the steps of:

receiving an indication of at least one item that a customer has purchased for a
total price from a first vendor;

10 receiving contact information of the customer;

determining an offer for a subsidy from a second vendor;

providing an indication of the offer using the contact information;

receiving a response to the offer;

receiving a credit card account identifier that identifies a credit card account;

15 and

crediting an amount of funds to the credit card account if the response indicates
that the offer is accepted.

38. The method of claim 37, further comprising:

determining if contact information of the customer is stored; and

requesting contact information of the customer if contact information of the customer is not stored.

39. The method of claim 37, in which the step of receiving an indication of at least one item that a customer has purchased comprises:

5 receiving an indication of items that a plurality of customers have purchased.

40. The method of claim 39, in which the step of receiving an indication of items that a plurality of customers have purchased is performed at predetermined times.

41. A method, comprising the steps of:

10 receiving information relating to customer activity on a Web site of a first vendor;

determining whether to provide an offer for a subsidy based on the information relating to customer activity;

determining an offer for a subsidy from a second vendor;

15 displaying, via a Web page on the Web site, an indication of the offer for the subsidy from the second vendor;

receiving customer input via the Web site, the customer input representing a response to the offer;

receiving a selection of at least one item the customer desires to purchase, the at least one item having an associated total price;

receiving a credit card identifier that identifies a credit card account; and
charging a second price to the credit card account if the response indicates that
the offer is accepted, the second price being less than the total price.

42. A method, comprising the steps of:

5 receiving information relating to customer activity at a POS terminal of a first
vendor;

determining whether to provide an offer for a subsidy based on the information
relating to customer activity;

determining an offer for a subsidy from a second vendor;

10 outputting at the POS terminal an indication of the offer for the subsidy from
the second vendor;

receiving customer input via the POS terminal, the customer input representing
a response to the offer;

15 receiving a selection of at least one item the customer desires to purchase, the at
least one item having an associated total price;

receiving a credit card identifier that identifies a credit card account; and

charging a second price to the credit card account if the response indicates that
the offer is accepted, the second price being less than the total price.

43. A method, comprising the steps of:

receiving information relating to customer activity with an IVRU of a first vendor;

determining whether to provide an offer for a subsidy based on the information relating to customer activity;

5 determining an offer for a subsidy from a second vendor;

transmitting via the IVRU an indication of the offer for the subsidy from the second vendor;

receiving via the IVRU a customer input that represents a response to the offer;

10 receiving via the IVRU a selection of at least one item the customer desires to purchase, the at least one item having an associated total price;

receiving via the IVRU a credit card identifier that identifies a credit card account; and

charging a second price to the credit card account if the response indicates that the offer is accepted, the second price being less than the total price.

15 44. A method, comprising the steps of:

receiving information relating to customer activity of a customer with a first vendor;

determining whether to provide an offer for a subsidy based on the information relating to customer activity;

20 determining an offer for a subsidy from a second vendor, the offer defining an obligation for the customer to fulfill in exchange for the subsidy;

providing an indication of the offer for the subsidy from the second vendor;
receiving an indication of at least one item the customer desires to purchase, the
at least one item having an associated total price;
receiving a credit card account identifier that identifies a credit card account;
5 charging a second price to the credit card account, the second price being less
than the total price;
determining whether the customer has fulfilled the obligation; and
charging a discount amount to the credit card account if the customer has not
fulfilled the obligation, the discount amount being based on a difference between the
10 total price and the second price.

45. The method of claim 44, in which the step of determining whether the customer
has fulfilled the obligation comprises:

receiving an indication that the customer has switched service providers.

46. The method of claim 44, in which the step of determining whether the customer
15 has fulfilled the obligation comprises:

determining whether the customer has become a new customer of the second
vendor.

47. The method of claim 44, in which the step of charging a second price to the
credit card account comprises:

charging the second price to the credit card account in one transaction.

48. The method of claim 44, in which the step of charging a second price to the credit card account comprises:

charging the total price to the credit card account; and

5 crediting the discount amount to the credit card account.

49. A method, comprising the steps of:

receiving information relating to customer activity of a customer with a first vendor;

10 providing, in response to the received indication, an indication of an offer for a subsidy from a second vendor;

receiving an indication of at least one item the customer desires to purchase, the at least one item having an associated total price;

receiving a response to the offer; and

15 providing the at least one item to the customer for free if the response indicates acceptance of the offer.

50. The method of claim 49, further comprising:

providing a credit to the customer if the response indicates acceptance of the offer.

51. An apparatus, comprising:

means for receiving information relating to customer activity of a customer with
a first vendor;

means for providing, in response to the received information, an indication of an
5 offer for a subsidy from a second vendor;

means for receiving an indication of at least one item the customer desires to
purchase, the at least one item having an associated total price; and

means for charging the customer a second price for the at least one item if the
offer is accepted, the second price being less than the total price.

10 52. An apparatus, comprising:

a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

15 receive information relating to customer activity of a customer with a
first vendor;

provide, in response to the received information, an indication of an
offer for a subsidy from a second vendor;

20 receive an indication of at least one item the customer desires to
purchase, the at least one item having an associated total price; and

charge the customer a second price for the at least one item if the offer is accepted, the second price being less than the total price.

53. A computer readable medium encoded with processing instructions for implementing a method performed by a computer, the method comprising the steps of:

5 receiving information relating to customer activity of a customer with a first vendor;

providing, in response to the received information, an indication of an offer for a subsidy from a second vendor;

10 receiving an indication of at least one item the customer desires to purchase, the at least one item having an associated total price; and

charging the customer a second price for the at least one item if the offer is accepted, the second price being less than the total price.

54. An apparatus, comprising:

15 means for receiving information relating to customer activity with a first vendor;

means for determining whether to provide an offer for a subsidy based on the information relating to customer activity;

means for determining an offer for a subsidy from a second vendor;

20 means for providing an indication of the offer for the subsidy from the second vendor;

means for receiving a response to the offer;

means for receiving an indication of at least one item the customer desires to purchase, the at least one item having an associated total price; and

means for charging the customer a second price for the at least one item if the response indicates that the offer is accepted, the second price being less than the total price.

55. An apparatus, comprising:

a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and
the processor operative with the program to:

receive information relating to customer activity with a first vendor;

determine whether to provide an offer for a subsidy based on the information relating to customer activity;

determine an offer for a subsidy from a second vendor;

provide an indication of the offer for the subsidy from the second vendor;

receive a response to the offer;

receive an indication of at least one item the customer desires to purchase, the at least one item having an associated total price; and

charge the customer a second price for the at least one item if the response indicates that the offer is accepted, the second price being less than the total price.

56. A computer readable medium encoded with processing instructions for
- 5 implementing a method performed by a computer, the method comprising the steps of:
- receiving information relating to customer activity with a first vendor;
 - determining whether to provide an offer for a subsidy based on the information relating to customer activity;
 - determining an offer for a subsidy from a second vendor;
 - 10 providing an indication of the offer for the subsidy from the second vendor;
 - receiving a response to the offer;
 - receiving an indication of at least one item the customer desires to purchase, the at least one item having an associated total price; and
 - charging the customer a second price for the at least one item if the response
 - 15 indicates that the offer is accepted, the second price being less than the total price.

57. An apparatus, comprising:
- means for receiving an indication of at least one item that a customer has purchased for a total price from a first vendor;
 - means for receiving contact information of the customer;
 - 20 means for determining an offer for a subsidy from a second vendor;

means for providing an indication of the offer using the contact information;

means for receiving a response to the offer;

means for receiving a credit card account identifier that identifies a credit card account; and

5 means for crediting an amount of funds to the credit card account if the response indicates that the offer is accepted.

58. An apparatus, comprising:

a data storage device; and

a processor connected to the data storage device,

10 the data storage device storing a program for controlling the processor; and
the processor operative with the program to:

receive an indication of at least one item that a customer has purchased
for a total price from a first vendor;

receive contact information of the customer;

15 determine an offer for a subsidy from a second vendor;

provide an indication of the offer using the contact information;

receive a response to the offer;

receive a credit card account identifier that identifies a credit card
account; and

20 credit an amount of funds to the credit card account if the response indicates that the offer is accepted.

59. A computer readable medium encoded with processing instructions for implementing a method performed by a computer, the method comprising the steps of:

receiving an indication of at least one item that a customer has purchased for a total price from a first vendor;

5 receiving contact information of the customer;

determining an offer for a subsidy from a second vendor;

providing an indication of the offer using the contact information;

receiving a response to the offer;

receiving a credit card account identifier that identifies a credit card account;

10 and

crediting an amount of funds to the credit card account if the response indicates that the offer is accepted.

60. An apparatus, comprising:

means for receiving information relating to customer activity on a Web site of a

15 first vendor;

means for determining whether to provide an offer for a subsidy based on the information relating to customer activity;

means for determining an offer for a subsidy from a second vendor;

means for displaying, via a Web page on the Web site, an indication of the offer

20 for the subsidy from the second vendor;

means for receiving customer input via the Web site, the customer input representing a response to the offer;

means for receiving a selection of at least one item the customer desires to purchase, the at least one item having an associated total price;

5 means for receiving a credit card identifier that identifies a credit card account;
and

means for charging a second price to the credit card account if the response indicates that the offer is accepted, the second price being less than the total price.

61. An apparatus, comprising:

10 a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive information relating to customer activity on a Web site of a first

15 vendor;

determine whether to provide an offer for a subsidy based on the information relating to customer activity;

determine an offer for a subsidy from a second vendor;

20 display, via a Web page on the Web site, an indication of the offer for the subsidy from the second vendor;

receive customer input via the Web site, the customer input representing a response to the offer;

receive a selection of at least one item the customer desires to purchase, the at least one item having an associated total price;

5 receive a credit card identifier that identifies a credit card account; and
charge a second price to the credit card account if the response indicates that the offer is accepted, the second price being less than the total price.

62. A computer readable medium encoded with processing instructions for implementing a method performed by a computer, the method comprising the steps of:

10 receiving information relating to customer activity on a Web site of a first vendor;

determining whether to provide an offer for a subsidy based on the information relating to customer activity;

determining an offer for a subsidy from a second vendor;

15 displaying, via a Web page on the Web site, an indication of the offer for the subsidy from the second vendor;

receiving customer input via the Web site, the customer input representing a response to the offer;

20 receiving a selection of at least one item the customer desires to purchase, the at least one item having an associated total price;

receiving a credit card identifier that identifies a credit card account; and

charging a second price to the credit card account if the response indicates that the offer is accepted, the second price being less than the total price.

63. An apparatus, comprising:

means for receiving information relating to customer activity at a POS terminal

5 of a first vendor;

means for determining whether to provide an offer for a subsidy based on the information relating to customer activity;

means for determining an offer for a subsidy from a second vendor;

10 means for outputting at the POS terminal an indication of the offer for the subsidy from the second vendor;

means for receiving customer input via the POS terminal, the customer input representing a response to the offer;

means for receiving a selection of at least one item the customer desires to purchase, the at least one item having an associated total price;

15 means for receiving a credit card identifier that identifies a credit card account; and

means for charging a second price to the credit card account if the response indicates that the offer is accepted, the second price being less than the total price.

64. An apparatus, comprising:

20 a data storage device; and

a processor connected to the data storage device,
the data storage device storing a program for controlling the processor; and
the processor operative with the program to:

- 5 receive information relating to customer activity at a POS terminal of a
first vendor;

determine whether to provide an offer for a subsidy based on the
information relating to customer activity;

determine an offer for a subsidy from a second vendor;

output at the POS terminal an indication of the offer for the subsidy
10 from the second vendor;

receive customer input via the POS terminal, the customer input
representing a response to the offer;

receive a selection of at least one item the customer desires to purchase,
the at least one item having an associated total price;
15 receive a credit card identifier that identifies a credit card account; and

charge a second price to the credit card account if the response indicates
that the offer is accepted, the second price being less than the total price.

65. A computer readable medium encoded with processing instructions for
implementing a method performed by a computer, the method comprising the steps of:
- 20 receiving information relating to customer activity at a POS terminal of a first
vendor;

determining whether to provide an offer for a subsidy based on the information relating to customer activity;

determining an offer for a subsidy from a second vendor;

outputting at the POS terminal an indication of the offer for the subsidy from
5 the second vendor;

receiving customer input via the POS terminal, the customer input representing a response to the offer;

receiving a selection of at least one item the customer desires to purchase, the at least one item having an associated total price;

10 receiving a credit card identifier that identifies a credit card account; and
charging a second price to the credit card account if the response indicates that the offer is accepted, the second price being less than the total price.

66. An apparatus, comprising:

means for receiving information relating to customer activity with an IVRU of a
15 first vendor;

means for determining whether to provide an offer for a subsidy based on the information relating to customer activity;

determining an offer for a subsidy from a second vendor;

means for transmitting via the IVRU an indication of the offer for the subsidy
20 from the second vendor;

means for receiving via the IVRU a customer input that represents a response to the offer;

means for receiving via the IVRU a selection of at least one item the customer desires to purchase, the at least one item having an associated total price;

5 means for receiving via the IVRU a credit card identifier that identifies a credit card account; and

means for charging a second price to the credit card account if the response indicates that the offer is accepted, the second price being less than the total price.

67. An apparatus, comprising:

10 a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

15 receive information relating to customer activity with an IVRU of a first vendor;

determine whether to provide an offer for a subsidy based on the information relating to customer activity;

determine an offer for a subsidy from a second vendor;

20 transmit via the IVRU an indication of the offer for the subsidy from the second vendor;

receive via the IVRU a customer input that represents a response to the offer;

receive via the IVRU a selection of at least one item the customer desires to purchase, the at least one item having an associated total price;

5 receive via the IVRU a credit card identifier that identifies a credit card account; and

charge a second price to the credit card account if the response indicates that the offer is accepted, the second price being less than the total price.

68. A computer readable medium encoded with processing instructions for
10 implementing a method performed by a computer, the method comprising the steps of:
receiving information relating to customer activity with an IVRU of a first vendor;

determining whether to provide an offer for a subsidy based on the information relating to customer activity;

15 determining an offer for a subsidy from a second vendor;
transmitting via the IVRU an indication of the offer for the subsidy from the second vendor;

receiving via the IVRU a customer input that represents a response to the offer;

receiving via the IVRU a selection of at least one item the customer desires to
20 purchase, the at least one item having an associated total price;

receiving via the IVRU a credit card identifier that identifies a credit card account; and

charging a second price to the credit card account if the response indicates that the offer is accepted, the second price being less than the total price.

5 69. An apparatus, comprising:

means for receiving information relating to customer activity of a customer with a first vendor;

means for determining whether to provide an offer for a subsidy based on the information relating to customer activity;

10 means for determining an offer for a subsidy from a second vendor, the offer defining an obligation for the customer to fulfill in exchange for the subsidy;

means for providing an indication of the offer for the subsidy from the second vendor;

15 means for receiving an indication of at least one item the customer desires to purchase, the at least one item having an associated total price;

means for receiving a credit card account identifier that identifies a credit card account;

means for charging a second price to the credit card account, the second price being less than the total price;

20 means for determining whether the customer has fulfilled the obligation; and

means for charging a discount amount to the credit card account if the customer has not fulfilled the obligation, the discount amount being based on a difference between the total price and the second price.

70. An apparatus, comprising:

5 a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive information relating to customer activity of a customer with a

10 first vendor;

determine whether to provide an offer for a subsidy based on the information relating to customer activity;

determine an offer for a subsidy from a second vendor, the offer defining an obligation for the customer to fulfill in exchange for the subsidy;

15 provide an indication of the offer for the subsidy from the second vendor;

receive an indication of at least one item the customer desires to purchase, the at least one item having an associated total price;

20 receive a credit card account identifier that identifies a credit card account;

charge a second price to the credit card account, the second price being less than the total price;

determine whether the customer has fulfilled the obligation; and

charge a discount amount to the credit card account if the customer has
5 not fulfilled the obligation, the discount amount being based on a difference between the total price and the second price.

71. A computer readable medium encoded with processing instructions for implementing a method performed by a computer, the method comprising the steps of:

receiving information relating to customer activity of a customer with a first
10 vendor;

determining whether to provide an offer for a subsidy based on the information relating to customer activity;

determining an offer for a subsidy from a second vendor, the offer defining an obligation for the customer to fulfill in exchange for the subsidy;

15 providing an indication of the offer for the subsidy from the second vendor;
receiving an indication of at least one item the customer desires to purchase, the at least one item having an associated total price;

receiving a credit card account identifier that identifies a credit card account;

charging a second price to the credit card account, the second price being less
20 than the total price;

determining whether the customer has fulfilled the obligation; and

charging a discount amount to the credit card account if the customer has not fulfilled the obligation, the discount amount being based on a difference between the total price and the second price.

72. An apparatus, comprising:

5 means for receiving information relating to customer activity of a customer with a first vendor;

means for providing, in response to the received indication, an indication of an offer for a subsidy from a second vendor;

10 means for receiving an indication of at least one item the customer desires to purchase, the at least one item having an associated total price;

means for receiving a response to the offer; and

means for providing the at least one item to the customer for free if the response indicates acceptance of the offer.

73. An apparatus, comprising:

15 a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

20 receive information relating to customer activity of a customer with a first vendor;

provide, in response to the received indication, an indication of an offer for a subsidy from a second vendor;

receive an indication of at least one item the customer desires to purchase, the at least one item having an associated total price;

5 receive a response to the offer; and

provide the at least one item to the customer for free if the response indicates acceptance of the offer.

74. A computer readable medium encoded with processing instructions for implementing a method performed by a computer, the method comprising the steps of:

10 receiving information relating to customer activity of a customer with a first vendor;

providing, in response to the received indication, an indication of an offer for a subsidy from a second vendor;

15 receiving an indication of at least one item the customer desires to purchase, the at least one item having an associated total price;

receiving a response to the offer; and

providing the at least one item to the customer for free if the response indicates acceptance of the offer.

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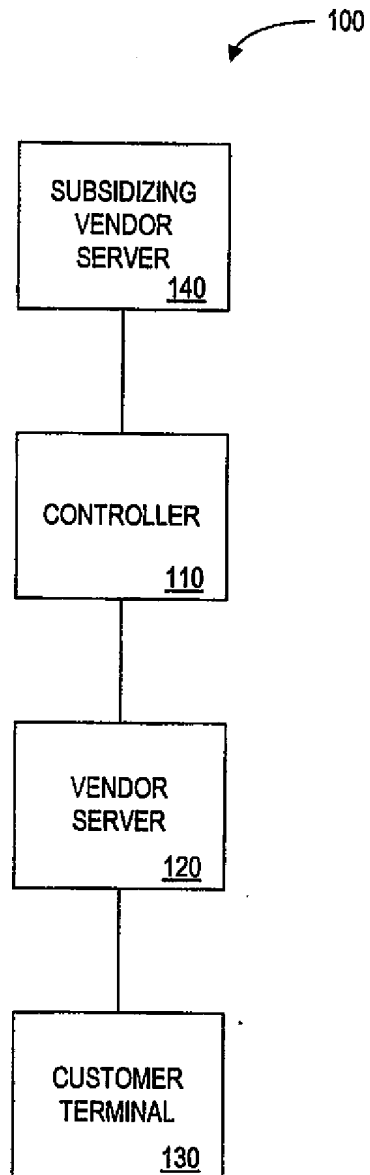


FIG. 1A

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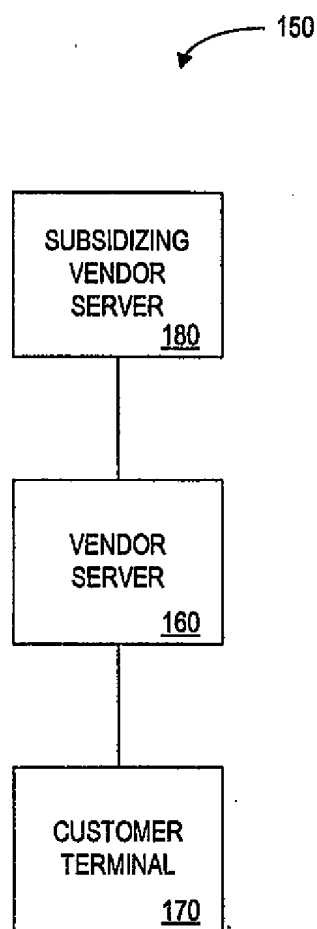


FIG. 1B

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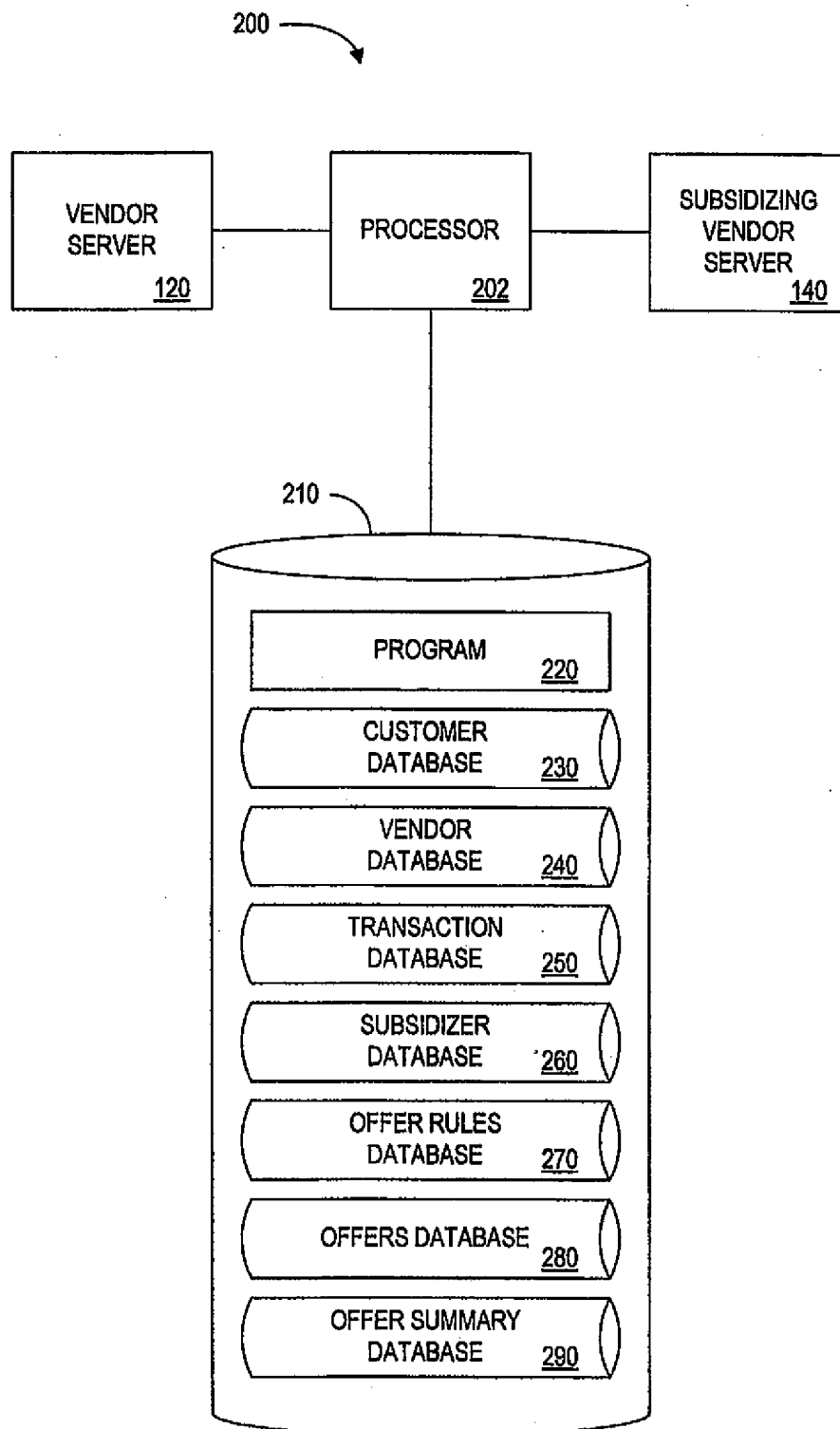


FIG. 2

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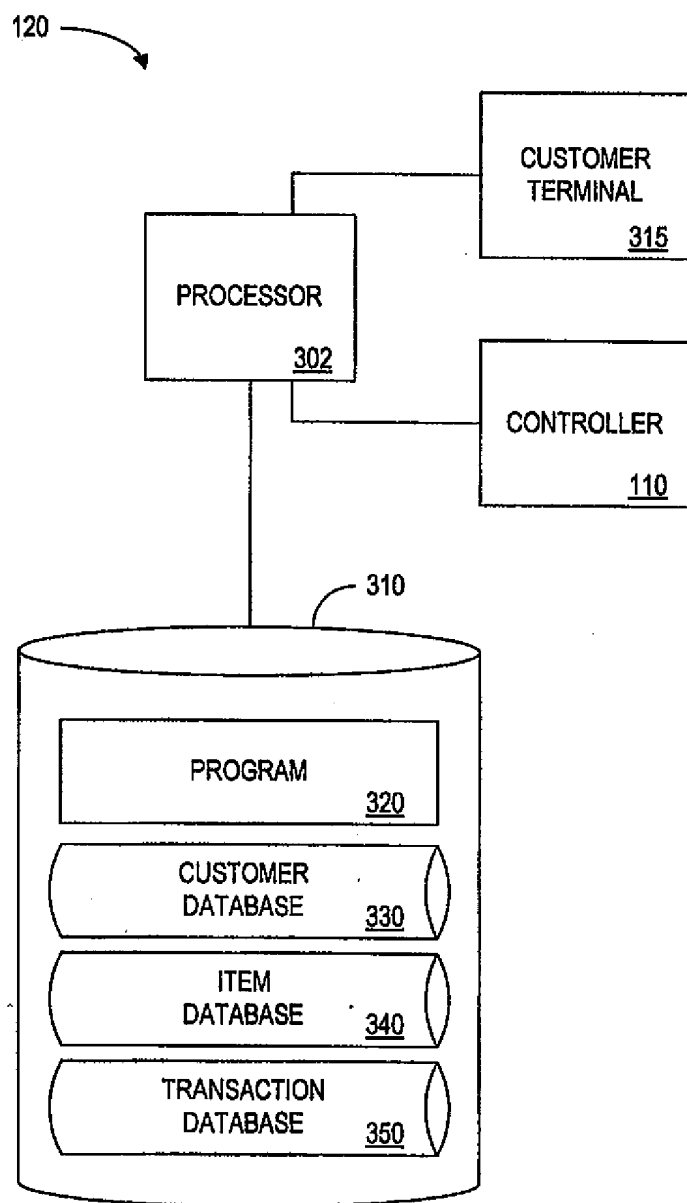


FIG. 3

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400

	CUSTOMER IDENTIFIER 420	NAME 422	BILLING ADDRESS 424	CREDIT CARD INFORMATION 426	E-MAIL 428
402	C0001	DAN MANN	123 MAIN ST.	VISA 1111-1111- 1111-1111	DMANN@ ISP.COM
404	C0002	STEVE DAVIS	3 RIVERPLACE ROAD	AMEX 4444-5555 6666-3333	SDAVIS@ SCHOOL.EDU
406	C0003	JEFF SMITH	2 THRUSH LANE	DIS 2222-3333 4444-7777	SMITH@ WEBTV.COM
408	C0004	GEORGE ALAN	15 LAUREL AVENUE	VISA 1111-4444- 8888-3333	ALAN@ WORK.COM

FIG. 4

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500

VENDOR IDENTIFIER <u>520</u>	VENDOR NAME <u>522</u>	VENDOR E-MAIL ADDRESS <u>524</u>	AMOUNT OWED TO VENDOR <u>526</u>
V001	VENDOR X	X@X.COM	\$0.00
V002	VENDOR Y	Y@Y.COM	\$100.00
V003	VENDOR Z	Z@Z.COM	\$987.13
V004	VENDOR Q	Q@Q.COM	\$45.00

FIG. 5

600

TRANSACTION IDENTIFIER 620	TIME OF TRANSACTION 622	ITEMS ORDERED 624	CREDIT CARD INFORMATION 626	AMOUNT CHARGED 628	DELIVERY ADDRESS 630	CUSTOMER IDENTIFIER 632
T 000 001	1/4/2001 8:07 AM	P038, P049, P812	VISA 1111-1111- 1111-1111 EXP. 3/2002	\$49.87	123 MAIN ST. TOWN, USA	NONE
T 000 002	1/9/2001 9:00 PM	P123	MASTERCARD 2222-2222- 2222-2222 EXP. 9/2002	\$0.00	9876 PARK AVE. CITY, USA	C1234
T 000 003	1/10/2001 3:02 AM	P456, P789, P789	AMEX 9999-9999- 9999-9999 EXP. 4/2005	\$0.00	24 SHADY LA. TOWN, USA	C5678

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FIG. 6

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700

<u>SUBSIDIZING VENDOR IDENTIFIER</u> 720	<u>SUBSIDIZING VENDOR NAME</u> 722	<u>ACCOUNT</u> 724	<u>AMOUNT OWED BY SUBSIDIZING VENDOR</u> 726	<u>RANK</u> 728
S001	CREDIT CARD COMPANY X	BANK ACCOUNT #2345678	\$855.00	1
S002	LONG DISTANCE TELEPHONE Y	MC 1111-2222- 3333-4444	\$4,390.00	2
S003	SATELLITE TELEVISION Z	PREPAID BALANCE \$10,500	\$0	3

702
704
706

FIG. 7

800

OFFER RULE IDENTIFIER 820	SUBSIDIZING VENDOR IDENTIFIER 822	CUSTOMER ACTIVITY 824	SUBSIDY AMOUNT 826	WHEN EFFECTIVE 828	ADDITIONAL TRANSACTION REQUIRED 830
R0001	S11	PUT ITEMS IN SHOPPING CART	UP TO \$50	ALWAYS	SIGN UP FOR CREDIT CARD ACCOUNT
R0002	S12	ACCESS WEB SITE 101	UP TO \$50	PURCHASING ITEM P004	SIGN UP FOR INTERNET ACCESS ACCOUNT
R0003	S12	ACCESS WEB SITE 102 FROM WEB SITE 103	\$40	CREDIT CARD = VISA AND TOTAL PRICE > \$100	SIGN UP FOR VISA PLUS ACCOUNT
R0004	213	READY TO PURCHASE AT LEAST \$100 OF ITEMS	\$100	CUSTOMER IS FROM A NEW ENGLAND STATE	SIGN UP FOR CELLULAR TELEPHONE SERVICE
R0005	S14	DOWNLOAD COUPONS FROM A RETAIL KIOSK	\$75	CUSTOMER DOES NOT HAVE CABLE TELEVISION FROM SERVICE PROVIDER	SIGN UP FOR CABLE TELEVISION

802 804 806 808 810

FIG. 8

900

OFFER IDENTIFIER 920	TRANSACTION IDENTIFIER 922	SUBSIDIZING VENDOR IDENTIFIER 924	OFFER RULE APPLIED 926	WHEN OFFERED 928	EXPIRATION DATE 930	SUBSIDY AMOUNT 932	TOTAL PRICE 934	TOTAL PRICE WITH SUBSIDY 936	WHEN ACCEPTED 938
F001	T000000123	S111	R1230	8:15 AM 1/3/2001	-	\$50	\$97.12	\$47.12	8:15 AM 1/3/2001
F002	T000000456	S222	R4561	1:01 PM 1/4/2001	-	\$100	\$19.95	\$19.95	REJECTED
F003	T000000789	S345	R7892	3:09 PM 1/8/2001	11:59 PM 1/15/2001	\$10	\$10.00	\$0	11:10 AM 1/14/2001
F004	T000000109	S678	R0123	8:00 PM 1/12/2001	11:59 PM 1/22/2001	\$15	\$15.00	\$0	10:09 AM 1/20/2001
F005	T000000555	S901	R3454	12:35 AM 1/12/2001	11:59 PM 2/12/2001	\$75	\$48.00	\$0	OFFER STILL OPEN

902

904

906

908

910

FIG. 9

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1000

SUBSIDIZING VENDOR IDENTIFIER: S888				1002
TOTAL NUMBER OF OFFERS: 1,794				1004
TOTAL NUMBER OF OFFERS ACCEPTED: 1,003				1006
TOTAL AMOUNT OF SUBSIDIES: \$52,800.00				1008
1010 1012	OFFER RULE IDENTIFIER 1020	NUMBER OF OFFERS 1022	NUMBER OF OFFERS ACCEPTED 1024	AMOUNT OF SUBSIDIES DUE 1026
	R1111	1004	500	\$2,500.00
	R2222	790	503	\$50,300.00

FIG. 10

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1100

1102

OFFER RULE IDENTIFIER R 3333			
CUSTOMER ACTIVITY 1120	NUMBER OF OFFERS 1122	NUMBER OF OFFERS ACCEPTED 1124	ACCEPTANCE RATE 1126
1104 PUT ITEMS IN SHOPPING CART	87	48	55%
1106 ACCESS WEB PAGE 9876	39	19	49%
1108 CLICK ON "PRODUCT INFORMATION" BUTTON	45	20	44%

FIG. 11

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1200

ITEM IDENTIFIER 1220	ITEM DESCRIPTION 1222	ITEM PRICE 1224	AVAILABILITY 1226
P001	WAR AND PEACE	\$13.95	IN STOCK
P002	SUN TZU: THE ART OF WAR	\$15.95	AVAILABLE IN 2-3 DAYS

1202

1204

FIG. 12

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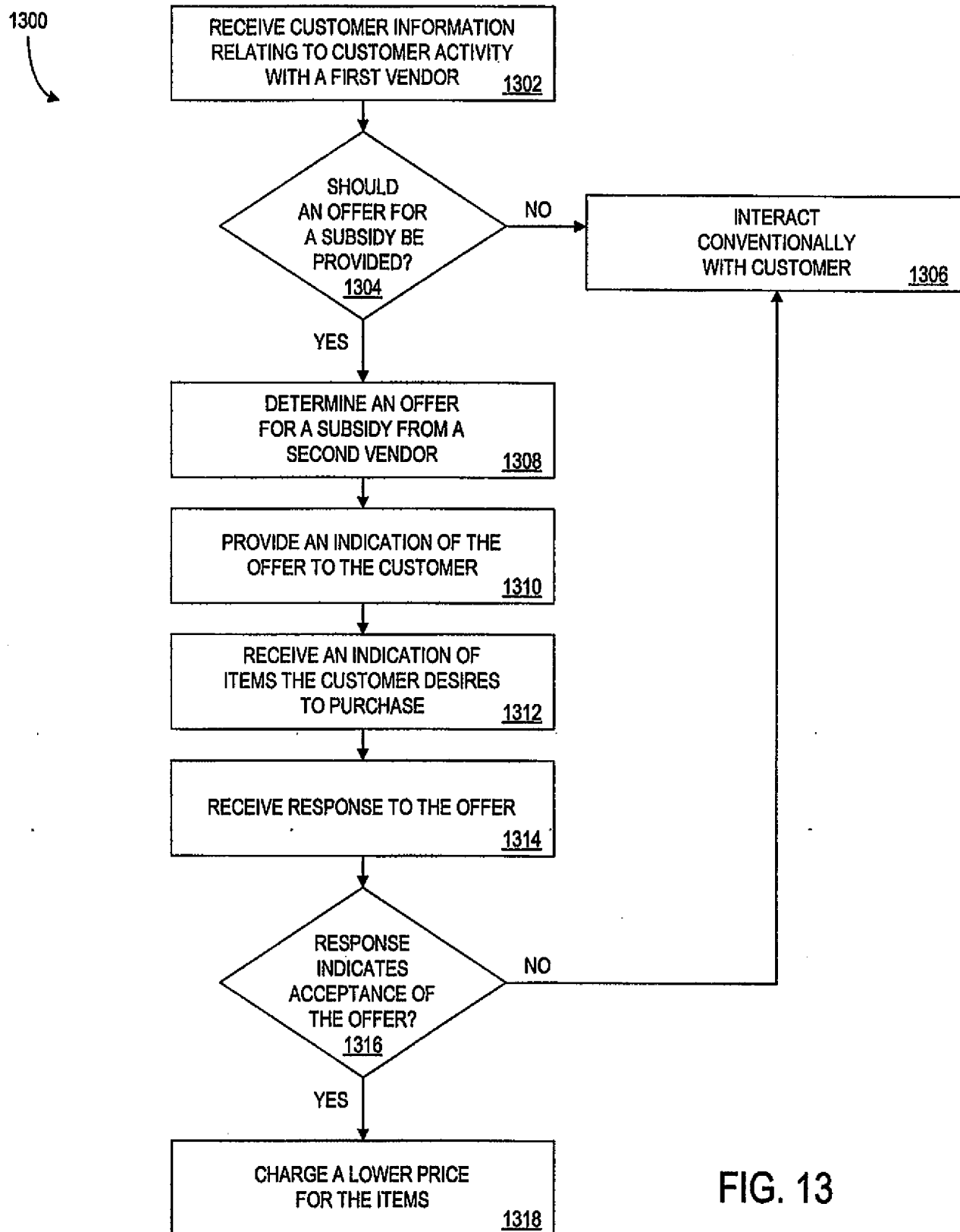


FIG. 13

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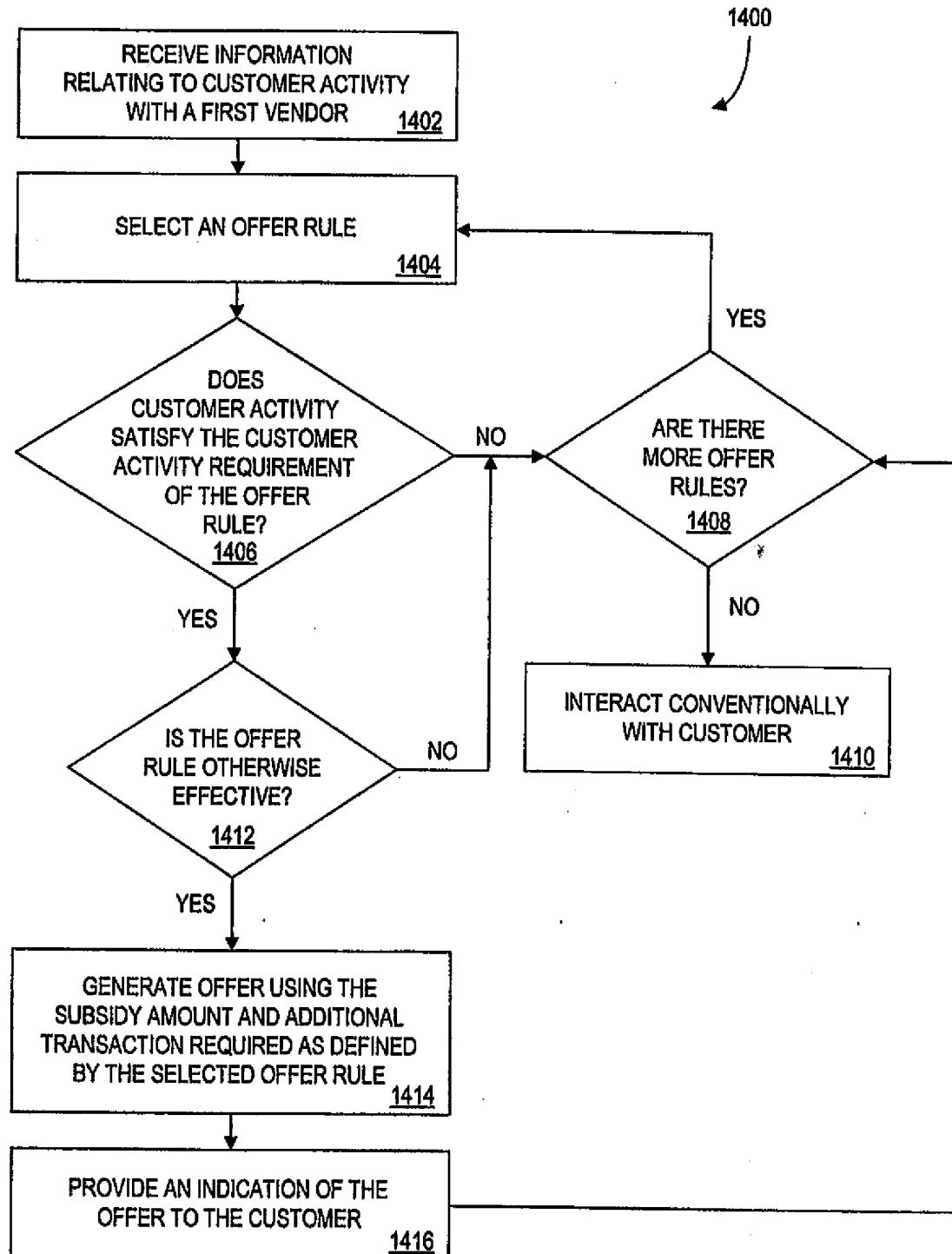


FIG. 14

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1500

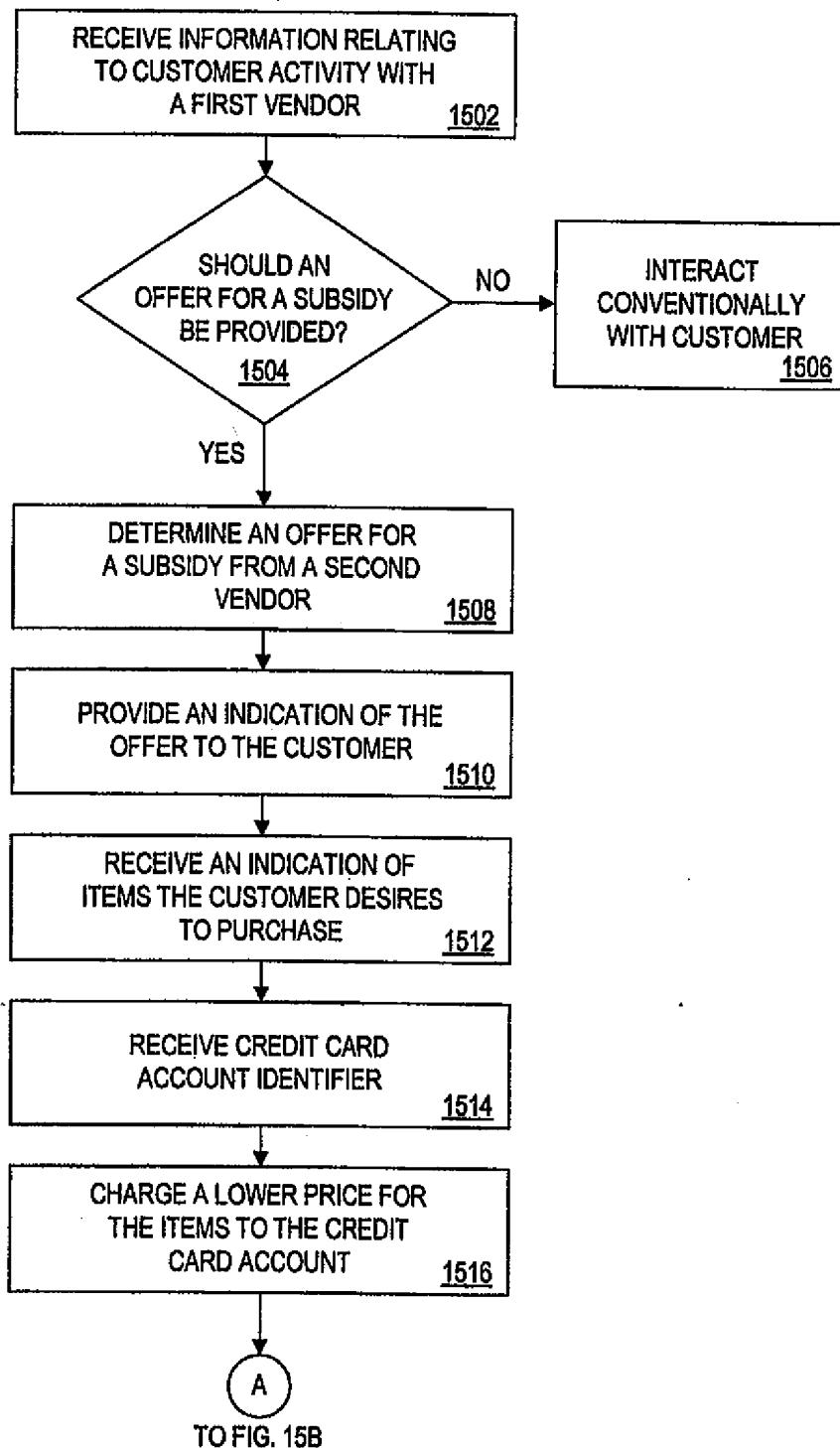


FIG. 15A

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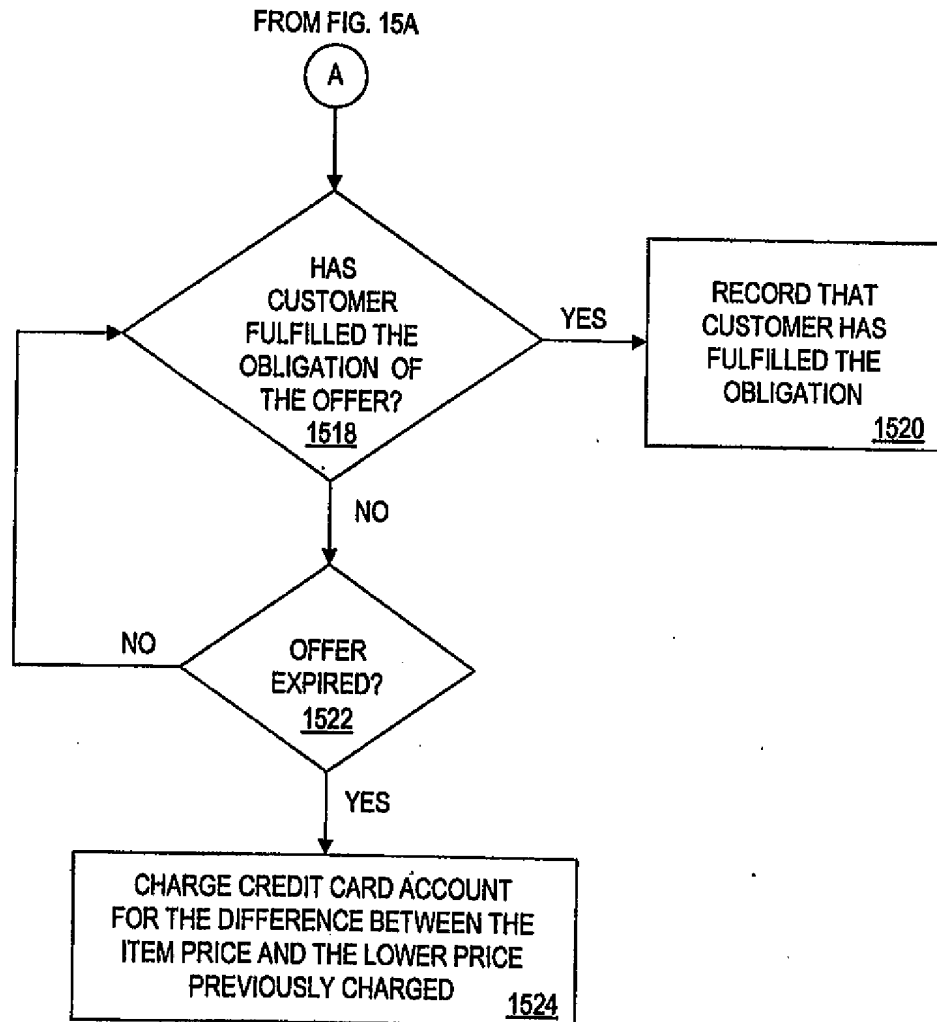


FIG. 15B

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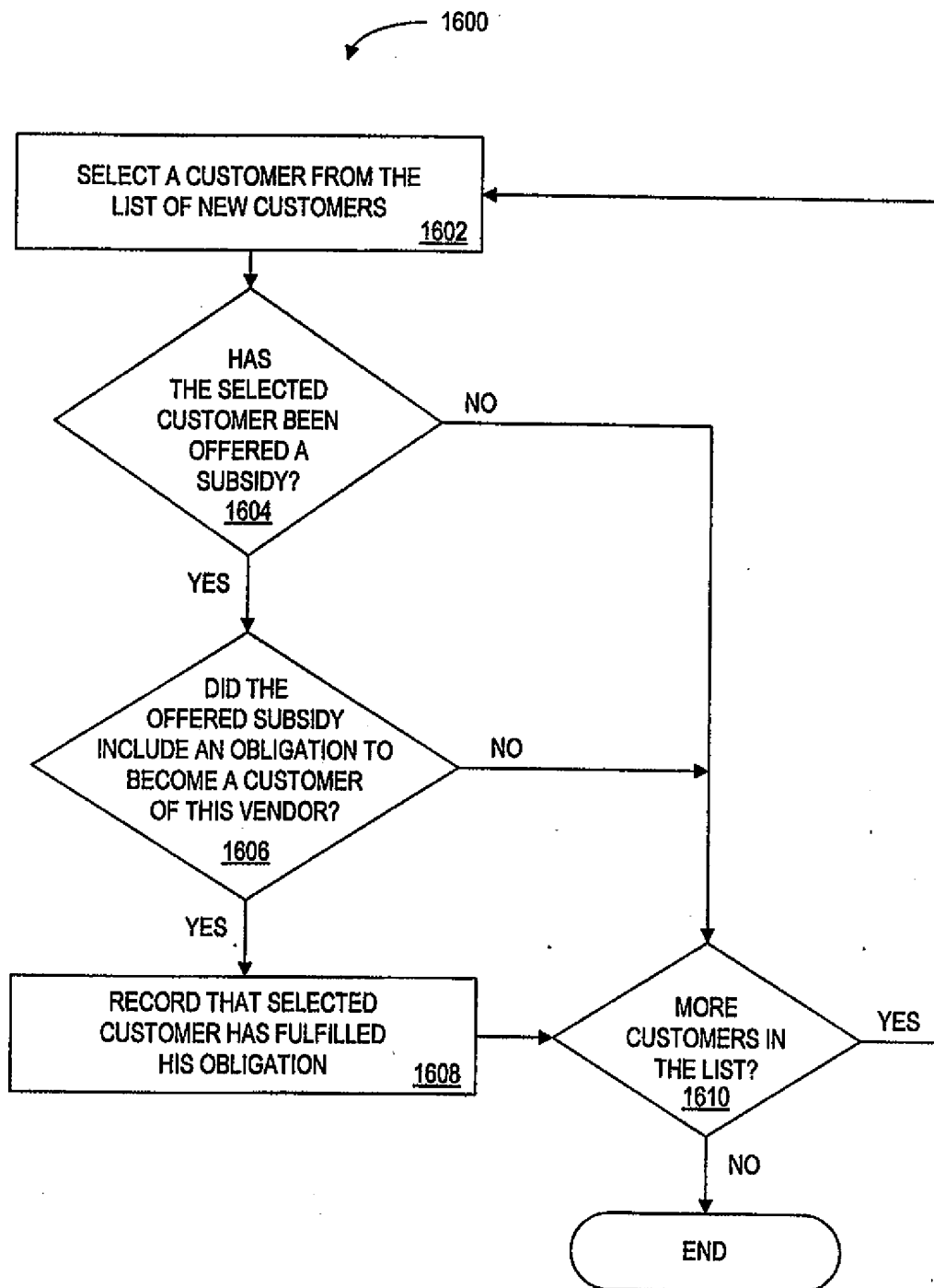


FIG. 16

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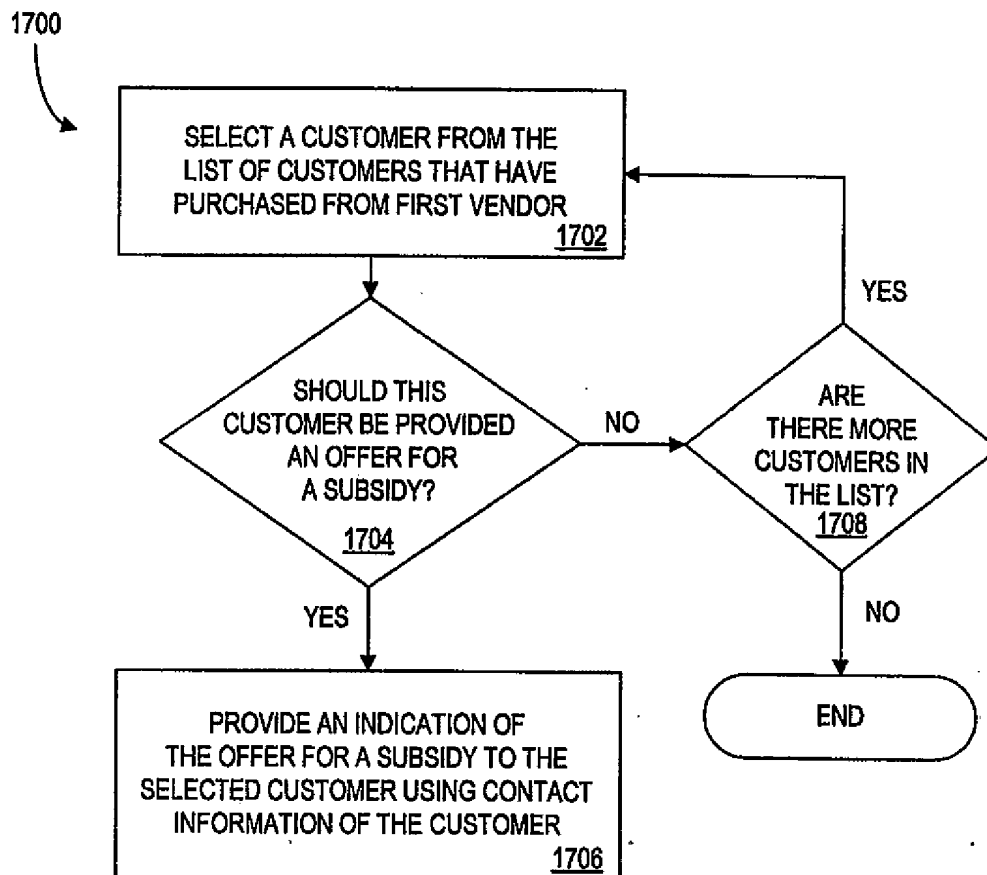


FIG. 17

INTERNATIONAL SEARCH REPORT

Intern: al Application No

PCT/US 99/19955

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96 31848 A (BURDON DOUGLAS ; SMITH DEAN BENNETT (CA)) 10 October 1996 (1996-10-10) abstract; claims 1-4 page 7, line 1 -page 12, line 22	1-74
X	US 5 297 026 A (HOFFMAN FRANK) 22 March 1994 (1994-03-22) abstract; claims 1-8 column 1, line 64 -column 3, line 45	1-74
X	US 5 537 314 A (KANTER MARK W) 16 July 1996 (1996-07-16) abstract column 12, line 45 -column 17, line 22	1-74

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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US 5537314	A	16-07-1996	NONE	



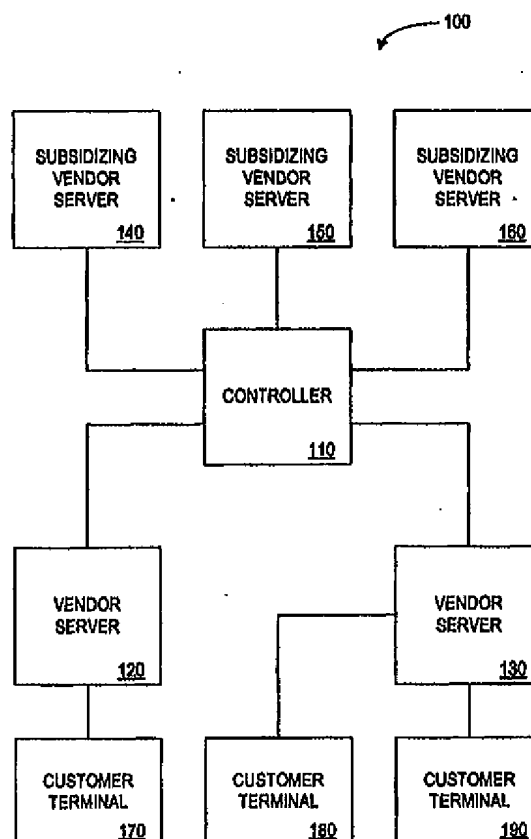
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(54) Title: METHOD AND APPARATUS FOR PROVIDING CROSS-BENEFITS VIA A CENTRAL AUTHORITY

(57) Abstract

A controller (110) is in communication with a plurality of vendors (170, 180, 190) that are servicing customers, as well as with a plurality of "subsiding" vendors (140, 150, 160) seeking access to those customers. The controller (110) receives from a first vendor an indication of one or more items that a customer is to purchase. In response, the controller (110) transmits, on behalf of a subsidizing vendor (140, 150, 160), an indication of an offer for a subsidy such as a reduction in the customer's purchase price. If the customer accepts the offer, the controller (110) provides an amount of funds from the subsidizing vendor to the first vendor. The controller (110) also facilitates a transaction between the customer and the subsidizing vendor (140, 150, 160). For example, the customer may be required to sign up for a service (e.g. credit card account service) that is provided by the subsidizing vendor (140, 150, 160).



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**METHOD AND APPARATUS FOR PROVIDING
CROSS-BENEFITS VIA A CENTRAL AUTHORITY**

The present application is a continuation-in-part application of co-

5 pending U.S. Patent Application No. 09/219,267 entitled "METHOD AND
APPARATUS FOR FACILITATING ELECTRONIC COMMERCE THROUGH
PROVIDING CROSS-BENEFITS DURING A TRANSACTION" to Jay S. Walker
and Daniel E. Tedesco filed on December 23, 1998, which is a continuation-in-part
application of co-pending U.S. patent application Serial No. 08/943,483 entitled

10 "SYSTEM AND METHOD FOR FACILITATING ACCEPTANCE OF
CONDITIONAL PURCHASE OFFERS (CPOs)" to Andrew S. Van Luchene, Daniel
E. Tedesco, James A. Jorasch, Jay S. Walker and Thomas M. Sparico filed on October
3, 1997, which is a continuation-in-part of co-pending U.S. patent application Serial
No. 08/923,683 entitled "CONDITIONAL PURCHASE OFFER (CPO)

15 MANAGEMENT SYSTEM FOR PACKAGES" to Andrew S. Van Luchene, Daniel E.
Tedesco, James A. Jorasch, Jay S. Walker and T. Scott Case filed September 4, 1997,
which is a continuation-in-part of U.S. patent application Serial No. 08/889,319 entitled
"CONDITIONAL PURCHASE OFFER MANAGEMENT SYSTEM" to Bruce
Schneier, James A. Jorasch, Jay S. Walker and T. Scott Case filed July 8, 1997, which

20 is a continuation-in-part of U.S. Patent No. 5,794,207 entitled "METHOD AND
APPARATUS FOR A CRYPTOGRAPHICALLY ASSISTED COMMERCIAL
NETWORK SYSTEM DESIGNED TO FACILITATE BUYER-DRIVEN
CONDITIONAL PURCHASE OFFERS" issued to Bruce Schneier, James A. Jorasch
and Jay S. Walker on August 11, 1998; and a continuation-in-part of co-pending U.S.

25 patent application Serial No. 09/100,684 entitled "BILLING STATEMENT

CUSTOMER ACQUISITION SYSTEM” to Daniel E. Tedesco, James A. Jorasch and Jay S. Walker filed on June 19, 1998, which is a continuation-in-part of co-pending U.S. patent application Serial No. 08/982,149 entitled “METHOD AND APPARATUS FOR PRINTING A BILLING STATEMENT TO PROVIDE SUPPLEMENTARY

5 PRODUCT SALES” to Jay S. Walker, Daniel E. Tedesco, Andrew S. Van Luchene and Dean P. Alderucci filed on December 1, 1997; and a continuation-in-part of co-pending U.S. patent application Serial No. 08/994,426 entitled “METHOD AND APPARATUS FOR PROVIDING SUPPLEMENTARY PRODUCT SALES TO A CUSTOMER AT A CUSTOMER TERMINAL” to Jay S. Walker, Andrew S. Van Luchene and Daniel

10 E. Tedesco filed on December 19, 1997, which is a continuation-in-part of co-pending U.S. patent application Serial No. 08/920,116 entitled “METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL” to Jay S. Walker, James A. Jorasch and Andrew S. Van Luchene

15 filed on August 26, 1997, which is a continuation-in-part of co-pending U.S. patent application Serial No. 08/822,709 entitled “SYSTEM AND METHOD FOR PERFORMING LOTTERY TICKET TRANSACTIONS UTILIZING POINT-OF-

SALE TERMINALS” to Jay S. Walker, James A. Jorasch and Sanjay K. Jindal filed on March 21, 1997, each of the foregoing applications incorporated herein by reference.

20 FIELD OF THE INVENTION

The present invention relates to methods and apparatus for facilitating commerce.

BACKGROUND OF THE INVENTION

There is a great deal of competition among vendors to attract and retain customers. Even when a customer has browsed a vendor's inventory, he will not make a purchase if an item's price is greater than the amount the customer is willing to pay.

5 One way to increase customer willingness to purchase is to provide discounts on items purchased. Unfortunately, vendors must use discounts sparingly, since reducing purchase prices likewise reduces margins and the reduced margins may not be offset by increased sales volume.

A vendor may also offer promotions to provide an incentive for
10 customers to make purchases. For example, a vendor may offer a "buy one get one free" promotion whereby a purchase of an item yields the benefit of an additional item at no cost. Similarly, a vendor may provide a discount on a purchase in exchange for signing up for a credit card account provided by the vendor.

Promotions may also be provided among two or more vendors. For
15 example, a first vendor may advertise that if a particular product is purchased, another product may be purchased from or given away by a second vendor.

The parent application of the present application, U.S. Patent
Application No. 09/219,267 entitled "METHOD AND APPARATUS FOR
FACILITATING ELECTRONIC COMMERCE THROUGH PROVIDING CROSS-
20 BENEFITS DURING A TRANSACTION", filed on December 23, 1998, discloses a method and apparatus that permits a customer that is purchasing items from a first vendor to receive a benefit (e.g. a credit for the price of the items) from a second vendor. The present application provides further embodiments of this novel and beneficial invention.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a method and apparatus for facilitating commerce.

5 In accordance with the present invention, a controller is in communication with a plurality of vendors that are servicing customers, as well as with a plurality of "subsidizing" vendors seeking access to those customers. The controller receives from a first vendor server an indication of one or more items that a customer is to purchase. In response, the controller transmits, on behalf of a subsidizing vendor, an
10 indication of an offer for a subsidy such as a reduction in the customer's purchase price.

 If the customer accepts the offer, the controller provides, directly or indirectly, an amount of funds from the subsidizing vendor to the first vendor. The controller may retain a portion of the amount of funds as payment. The controller also facilitates a transaction between the customer and the subsidizing vendor. For example,
15 the customer may be required to sign up for a service (e.g. credit card account service) that is provided by the subsidizing vendor. The controller may facilitate this transaction by providing a form for entry of customer information.

 By having the controller manage such a system by acting between subsidizing vendors and vendors that are servicing customers, a vendor need only
20 communicate with the controller, rather than a plurality of other vendors. Vendors likewise need only form one relationship with a central authority rather than with a plurality of other vendors. Furthermore, as new subsidizing vendors elect to participate, existing vendors automatically benefit from the new subsidies which may be possible.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic illustration of an apparatus for facilitating commerce in accordance with the present invention.

5 FIG. 2 is a schematic illustration of a controller of the apparatus of FIG. 1.

FIG. 3 is a schematic illustration of a vendor server of the apparatus of FIG. 1.

FIG. 4 is a representation of a customer database of the controller of FIG. 2.

FIG. 5 is a representation of a vendor database of the controller of FIG. 2.

FIG. 6 is a representation of a transaction database of the controller of FIG. 2.

10 FIG. 7 is a representation of a subsidizer database of the controller of FIG. 2.

FIG. 8 is a representation of an offer rules database of the controller of FIG. 2.

FIG. 9 is a representation of an offers database of the controller of FIG. 2.

FIG. 10 is a representation of a record of an offer summary database of the controller of FIG. 2.

15 FIG. 11 is a schematic illustration of an item database of the vendor server of FIG. 3.

FIG. 12 is a flow chart illustrating an embodiment of a method, performed by a vendor server, for providing an offer for a benefit.

20 FIG. 13 is a flow chart illustrating an embodiment of a method, performed by the controller of FIG. 2, for providing an offer for a benefit.

FIG. 14 is an exemplary web page.

FIG. 15 is another exemplary web page.

FIG. 16 is a flow diagram illustrating the transfer of funds among parties in accordance with the present invention.

FIGS. 17A and 17B are a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

FIGS. 18A and 18B are a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

5 FIG. 19 is a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

FIGS. 20A and 20B are a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

10 FIG. 21 is a table illustrating data used when a subsidy amount is applied over time.

FIG. 22 is a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

15 Applicants have recognized that the acquisition budgets of various vendors may be advantageously used to facilitate commerce. A customer that purchases items from a first vendor may be paid, directly or indirectly, by a second vendor, so that the customer pays a reduced price, perhaps nothing at all, for his desired items. In exchange, the customer participates or agrees to participate in a transaction
20 with the second vendor. As used herein, this "transaction" may be any interaction with the second vendor. For example, the customer may be required to sign up for a service that is provided by the second vendor. Since many service providers are willing to pay significant amounts of money (e.g. often \$50 to \$200) to acquire a new customer, the ability to acquire a customer by essentially "intervening" in a sale between others can

benefit all parties involved. The customer is benefited by the reduced price of his items, the first vendor is benefited by the increased sales and customer satisfaction that such an arrangement would bring, and the second vendor is benefited by the additional transaction, particularly the acquisition of a new customer in one embodiment.

5 In addition, applicants have also recognized that there are benefits to having a controller manage such a system by acting between subsidizing vendors and vendors that are servicing customers. For example, a vendor need only communicate with the controller, rather than with a plurality of other vendors. Vendors likewise need only form one relationship with a central authority rather than with a plurality of other
10 vendors. Furthermore, as new subsidizing vendors elect to participate, existing vendors automatically benefit from the new subsidies which may be possible.

 The controller of the present invention can also track customer information derived from several vendors, allowing subsidies to be better targeted to customers. The controller can also act to reduce or eliminate customer manipulation of
15 subsidy offers. For example, the controller can identify a customer that attempts to merely collect subsidies by agreeing to participate in contradictory transactions, such as simultaneously agreeing to switch to two telephone service providers.

 Referring to FIG. 1, an apparatus 100 includes a controller 110 that is in communication with vendor servers 120 and 130. The controller 110 and the vendor
20 servers 120 and 130 may comprise computers, such as those based on an Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of vendor servers may be in communication with the controller 110.

Each of the vendor servers 120 and 130 may be a "web server" of a vendor (e.g. a retail seller). A vendor server could then generate a web page that may be accessed via the World Wide Web and allow purchases from the vendor to be made in a manner known in the art. Alternatively, each of the vendor servers 120 and 130
5 may be a computer involved in operating a physical store. Such a computer, for example a point of sale (POS) server, would perform such tasks as inventory management and item pricing.

The controller 110 is also in communication with subsidizing vendor servers 140, 150 and 160. Each of the subsidizing vendor servers 140, 150 and 160
10 may comprise computers, such as those based on the Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of subsidizing vendor servers may be in communication with the controller 110.

Each of the subsidizing vendor servers 140, 150 and 160 may be a "web
15 server" of a vendor. A subsidizing vendor server could then generate a web page that may be accessed via the World Wide Web and allow transactions with the subsidizing vendor in a manner known in the art. Alternatively, each of the subsidizing vendor servers 140, 150 and 160 may be a computer involved in operating a physical store. Such a computer would perform such tasks as inventory management and item pricing.

20 A vendor server may be in communication with one or more customer terminals that transmit data on a customer transaction (e.g. a purchase). The vendor server 120 is in communication with a customer terminal 170, and the vendor server 130 is in communication with customer terminals 180 and 190. Any or all of the customer terminals 170, 180 and 190 may be point of sale (POS) terminals, such as the

NCR 7454 manufactured by NCR Corporation or the IBM 4683 manufactured by International Business Machines. As is known in the art, POS terminals perform such processes as calculating the total price of a purchase (goods or services) and calculating the amount of change due to a customer. POS terminals may furthermore track purchases made and adjust databases of inventory accordingly.

In another embodiment, any or all of the customer terminals 170, 180 and 190 may be computers, such as those based on the Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Such computers are able to appropriately access a web page to communicate with a vendor server in a manner that is known to those skilled in the art.

In still other embodiments, any or all of the customer terminals 170, 180 and 190 may be telephones, vending machines, other devices that can receive payment from customers in exchange for providing goods or services, pagers or palmtop computers such as personal digital assistants (PDAs).

Referring to FIG. 2, the controller 110 comprises a processor 200, such as the Intel® Pentium® microprocessor. The processor 200 is in communication with a data storage device 210, such as an appropriate combination of magnetic, optical and/or semiconductor memory. For example, the data storage device 210 may comprise one or more of a ROM, RAM and hard disk. The processor 200 and the data storage device 210 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. In one embodiment, the controller 110 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

The data storage device 210 stores a program 220 for controlling the processor 200. The processor 200 performs instructions of the program 220, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 220 furthermore
5 includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 200 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 210 also stores (i) a customer database 230, (ii) a
10 vendor database 240, (iii) a transaction database 250, (iv) a subsidizer database 260, (v) an offer rules database 270, (vi) an offers database 280 and (vii) an offer summary database 290. The databases 230, 240, 250, 260, 270, 280 and 290 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying
15 descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown. Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

20 Referring to FIG. 3, a vendor server 300 is illustrative of the vendor servers 120 and 130 (FIG. 1). The vendor server comprises a processor 302, such as the Intel® Pentium® microprocessor, which is in communication with a customer terminal 315 and the controller 110. The processor 302 is also in communication with a data storage device 310, such as an appropriate combination of magnetic, optical

and/or semiconductor memory. For example, the data storage device 310 may comprise one or more of a ROM, RAM and hard disk. The processor 302 and the data storage device 310 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. In one embodiment, the vendor server 300 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

The data storage device 310 stores a program 320 for controlling the processor 302. The processor 302 performs instructions of the program 320, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 320 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 302 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 310 also stores (i) a customer database 330, (ii) an item database 340, and (iii) a transaction database 350. The customer database 330 and the transaction database 350 of the vendor server 300 may be similar or identical to the customer database 230 and transaction database 250 of the controller 110. For example, the controller 110 may store data that is derived from the vendor server 300, and vice versa. If each vendor server stores data on its own customers and its own transactions, the controller 110 could aggregate this data from each vendor server.

The databases 330, 340 and 350 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown. Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

Referring to FIG. 4, a table 400 represents an embodiment of the customer database 230 (FIG. 2) and/or the customer database 330 (FIG. 3). The table 400 includes entries 402, 404, 406 and 408, each defining a customer that may purchase items from a vendor. Such information may be determined, for example, when a customer registers for a frequent shopper card. Those skilled in the art will understand that the table 400 may include any number of entries. The table 400 also defines fields for each of the entries 402, 404, 406 and 408. The fields specify (i) a customer identifier 420 that uniquely identifies the customer, (ii) a name 422 of the customer, (iii) a billing address 424 of the customer, (iv) credit card information 426 which may be used to render payment in purchasing the items, and (v) an electronic mail ("email") address 428 for communication with the customer.

Referring to FIG. 5, a table 500 represents an embodiment of the vendor database 240 (FIG. 2). The table 500 includes entries 502, 504, 506 and 508, each defining a vendor that services customers and may have those customers receive offers for subsidies. Such information may be determined when a vendor registers for participation in the subsidizing program described herein. Those skilled in the art will

understand that the table 500 may include any number of entries. The table 500 also defines fields for each of the entries 502, 504, 506 and 508. The fields specify (i) a vendor identifier 520 that uniquely identifies the vendor, (ii) a vendor name 522, (iii) a vendor email address 524 for communication with the vendor, and (iv) an amount owed
5 526 to the vendor (e.g. promised but unpaid subsidy amounts).

Referring to FIG. 6, a table 600 represents an embodiment of the transaction database 250 (FIG. 2) and/or the transaction database 350 (FIG. 3). The table 600 includes entries 602, 604 and 606, each defining a transaction with a vendor server. Typically, the transaction includes a purchase of items by a customer. Those
10 skilled in the art will understand that the table 600 may include any number of entries. The table 600 also defines fields for each of the entries 602, 604 and 606. The fields specify (i) a transaction identifier 620 that uniquely identifies the transaction, (ii) a time 622 of the transaction, (iii) the items ordered 624, (iv) credit card information 626 that may define a credit card account that was charged to pay for the items purchased, (v) an
15 amount charged 628 for the items, (vi) a delivery address 630 for the items, and (vii) a customer identifier 632 (if any) that identifies the customer that made the purchase. Other forms of payment may be used besides a credit card account. For example, debit accounts or "electronic cash" may be used to render payment.

Referring to FIG. 7, a table 700 represents an embodiment of the
20 subsidizer database 260 (FIG. 2). The table 700 includes entries 702, 704 and 706, each defining a subsidizing vendor that may subsidize purchases. Such information may be determined when a subsidizing vendor registers for participation in the subsidizing program described herein. Those skilled in the art will understand that the table 700 may include any number of entries. The table 700 also defines fields for each

of the entries 702, 704 and 706. The fields specify (i) a subsidizing vendor identifier 720 that uniquely identifies the subsidizing vendor, (ii) a name 722 of the subsidizing vendor, (iii) an account 724 used to pay for the subsidies, (iv) an amount owed 726 by the subsidizing vendor, and (v) a rank 728 used to prioritize subsidizing vendors and/or subsidies from those subsidizing vendors. The ranks may be established periodically (e.g. once per year) or substantially continuously based on various criteria. For example, the ranks may be adjusted dynamically based on the acceptance rates of offers from the subsidizing vendors and/or amount of funds the subsidizing vendors have provided in connection with their offers.

Referring to FIG. 8, a table 800 represents an embodiment of the offer rules database 270 (FIG. 2). The table 800 includes entries 802, 804, 806, 808 and 810, each defining an offer rule. When an offer rule is satisfied during a transaction, the vendor provides an offer for a specified benefit, such as a subsidy. Such information may be determined when a subsidizing vendor registers for participation in the subsidizing program described herein. Those skilled in the art will understand that the table 800 may include any number of entries. The table 800 also defines fields for each of the entries 802, 804, 806, 808 and 810. The fields specify (i) an offer rule identifier 820 that uniquely identifies the offer rule, (ii) a subsidizing vendor identifier 822 that uniquely identifies the subsidizing vendor, (iii) a subsidy amount 824, (iv) when the offer rule is effective 826 (i.e. when the offer rule is satisfied), and (v) an additional transaction 828 that is required of the customer in exchange for the subsidy. As described below, several types of transactions, such as additional purchases or initiating service agreements, may be required of the customer.

Referring to FIG. 9, a table 900 represents an embodiment of the offers database 280 (FIG. 2). The table 900 includes entries 902, 904, 906, 908 and 910, each defining an offer for a subsidy. The offer was provided to a customer during a transaction of the customer with the vendor. Those skilled in the art will understand that the table 900 may include any number of entries. The table 900 also defines fields for each of the entries 902, 904, 906, 908 and 910. The fields specify (i) an offer identifier 920 that uniquely identifies the offer, (ii) a transaction identifier 922 that uniquely identifies the transaction during which the offer was provided, (iii) a subsidizing vendor identifier 924 that uniquely identifies the subsidizing vendor, (iv) an identifier of an offer rule 926 that was applied during the transaction, (v) a subsidy amount 928, (vi) a total price 930 that the customer would have to pay without the subsidy, (vii) a total price 932 that the customer would have to pay with the subsidy, and (viii) whether the offer was accepted 934. As described above with reference to FIG. 8, offer rules define specific subsidies. Thus, the identifier of an offer rule stored in field 926 may be used to determine a corresponding subsidy amount.

Referring to FIG. 10, a table 1000 represents a record of an embodiment of the offer summary database 290 (FIG. 2). The offer summary database 290 typically includes a plurality of records, each defining a summary of offers for subsidies that have been provided on behalf of a subsidizing vendor. The table 1000 includes a subsidizing vendor identifier 1002 that uniquely identifies the subsidizing vendor, a total number of offers provided 1004 on behalf of the subsidizing vendor, a total number of those offers that were accepted 1006, and a total amount 1008 of the subsidies due in connection with accepted offers.

The table 1000 also includes entries 1010 and 1012, each defining offers provided due to satisfaction of an offer rule of the subsidizing vendor. Those skilled in the art will understand that the table 1000 may include any number of entries. The table 1000 also defines fields for each of the entries 1010 and 1012. The fields specify

5 (i) an offer rule identifier 1020 that uniquely identifies the offer rule, (ii) a number 1022 of offers provided due to the offer rule, (iii) a number 1024 of these offers that were accepted, (iv) an amount 1026 of the subsidies due in connection with these accepted offers. If desirable, the information stored in the offer summary database 290 (FIG. 2) may be organized by the vendor through which the offer was provided. Such an

10 embodiment would allow a comparison of the acceptance rate (number of offers accepted / number of offers provided) of offers at different vendors.

Referring to FIG. 11, a table 1100 represents an embodiment of the item database 340 (FIG. 3). The table 1100 includes entries 1102 and 1104, each defining an item sold via a vendor server. Those skilled in the art will understand that the table

15 1100 may include any number of entries. The table 1100 also defines fields for each of the entries 1102 and 1104. The fields specify (i) a item identifier 1120 that uniquely identifies the item, (ii) an item description 1122, (iii) an item price 1124 for which the item is typically sold, and (iv) an availability 1126 of the item which may be based on an inventory level of the item.

20 Referring to FIG. 12, a flow chart 1200 illustrates an embodiment of a method for providing an offer for a benefit (e.g. a reduced price) to a customer that is to purchase items from a vendor. In one embodiment, the illustrated method is performed by a vendor server after the customer has accessed a web page generated and/or controlled by the vendor server. In another embodiment, the illustrated method is

performed by a vendor server after a customer brings items he wishes to purchase to a POS terminal.

The vendor server receives an indication that the customer is to purchase items from the web site of the vendor (step 1202). For example, after a customer
5 accesses a web site of the vendor, the customer may select one or more items to purchase, and "click" a button that indicates that the customer desires to purchase the selected items. The act of clicking could generate a signal that the vendor server interprets as an indication that the customer is to purchase the selected items. In another embodiment, the act of accessing the web site could generate a signal that the
10 vendor server interprets as an indication that the customer is to purchase the selected items. In yet another embodiment, a bar code scanner reads bar codes on items the customer brings to a POS terminal. The bar code scanner then generates a signal that the vendor server interprets as an indication that the customer is to purchase the selected items. The item database 340 (FIG. 3) would provide relevant details about
15 each indicated item. Those skilled in the art will understand still other types of appropriate indications.

The vendor server then transmits the indication of the items to the controller 110 (step 1204). In response, the controller transmits and the vendor server receives an indication of an offer for a subsidy from a subsidizing vendor (step 1206).
20 This indication may include an indication of a subsidy amount. For example, referring again to FIG. 8, the field 824 specifies a subsidy amount for an offer rule, and such data could be included in the indication of an offer for a subsidy. The indication may also include an indication of a transaction the customer is required to perform in exchange

for receiving the subsidy amount. The field 828 (FIG. 8) specifies such a required transaction.

The vendor server provides the customer with an offer for the subsidy (step 1208). For example, the POS terminal may display a textual representation of the offer, which is read by the customer or read to the customer by a cashier. In another embodiment, the web page may display text describing the subsidy. The web page may be dynamically modified to include a button that, when clicked, indicates acceptance of an offer for a subsidy. Alternatively, the offer may be transmitted to the customer via email, telephone or other means.

A response to the offer is received (step 1210). For example, the customer or cashier may actuate a button that generates a representative signal for the POS terminal. In another embodiment, the customer may click a button on the web page or click on a hyperlink on the web page. If it is determined that the offer is not accepted (step 1212), then the transaction is processed conventionally (step 1214). For example, the items are to be purchased for the conventional total price, a credit card number is received and the corresponding credit card account is charged appropriately.

If it is determined that the offer is accepted (step 1212), then an indication of the acceptance is transmitted to the controller 110 (step 1216) and the customer is charged a reduced price for the items (step 1218). Charging a reduced price may comprise charging the conventional (i.e. unreduced) price followed by crediting the customer a discount amount. For example, if the items are normally sold for \$25 (as determined by prices specified by the item database 340), then \$25 is charged to a credit card account of the customer, and a discount amount (perhaps \$25 as well) is credited to the credit card account.

Referring to FIG. 13, a flow chart 1300 illustrates an embodiment of a method for providing an offer for a benefit to a customer. In one embodiment, the controller 110 (FIG. 1) performs the illustrated method after the customer has accessed a web page generated and/or controlled by the vendor server. In another embodiment, the controller 110 performs the illustrated method after a customer brings items he wishes to purchase to a POS terminal.

The controller 110 receives an indication that the customer is to purchase items from a first vendor (step 1302). For example, a customer may bring items to purchase to a POS terminal, at which point the items are scanned by a bar code scanner. The POS terminal in turn transmits an indication of the items to the vendor server, which in turn transmits the indication to the controller 110 (step 1204 of FIG. 12), which receives the indication. In another embodiment, after the customer accesses a web site, the customer may select one or more items to purchase, and "click" a button that indicates that the customer desires to purchase the selected items. The act of clicking could generate a signal that is transmitted via the vendor server to the controller 110. Alternatively, the customer terminal may include "client-side" software that detects various types of customer activity and in response generates signals and transmits the signals via the vendor server to the controller 110. The controller 110 interprets the signal as an indication that the customer is to purchase the selected items. In another embodiment, the act of accessing the web site could generate a signal that the controller 110 interprets as an indication that the customer is to purchase the selected items. Those skilled in the art will understand still other types of appropriate indications.

In response to the indication that the customer is to purchase items from the first vendor, the controller 110 transmits to the vendor server an indication of an offer for a subsidy from a second vendor (step 1304). The controller 110 may then create an entry in the offers database 280 (FIG. 2) to record the offer. In particular, the
5 total price with subsidy may be calculated by subtracting the subsidy amount from the total price of the items. The controller 110 may also create an appropriate record of the offer summary database 290 (FIG. 2). The controller 110 subsequently receives an indication of the customer response (step 1306) from the vendor server. This response is also recorded in the appropriate entry of the offers database 280. If the customer did
10 not accept the offer (step 1308), the transaction is processed conventionally (step 1310).

If the customer accepted the offer, the controller 110 provides funds to the first vendor (step 1312). As described below, the funds provided to the first vendor may equal or exceed the amount of reduction in price of the customer's purchase. The controller 110 may provide funds a short time after the offer is accepted (e.g.
15 substantially immediately). Alternatively, the controller 110 may provide funds periodically (e.g. in accordance with a periodic remittance cycle). For example, the controller 110 may maintain a running balance of funds owed to various vendors. At the end of the month, the controller would transmit the aggregate amount to the appropriate vendor or vendors. The step of providing funds may comprise crediting an
20 account corresponding to the first vendor. Alternatively, providing funds may comprise initiating a transfer of funds (e.g. a "wire transfer") to an account corresponding to the first vendor.

In another embodiment described in the parent application, U.S. Patent Application No. 09/219,267 entitled "METHOD AND APPARATUS FOR

FACILITATING ELECTRONIC COMMERCE THROUGH PROVIDING CROSS-BENEFITS DURING A TRANSACTION", filed on December 23, 1998, the controller 110 provides funds to the customer by crediting an account of the customer.

In exchange for the subsidy, the customer is obligated to participate in a transaction with the second vendor. Accordingly, the controller 110 facilitates the required transaction between the customer and the second vendor (step 1314). For example, the controller 110 may provide, directly or indirectly, a form for the customer to complete. In another embodiment, the controller 110 may initiate the transfer of information about the customer (e.g. a service provider of the customer) to the second vendor. The controller may record each interaction with a customer in the transaction database 250 (FIG. 2).

Referring to FIG. 14, an exemplary web page 1400 illustrates a possible means for providing an offer for a benefit and receiving an acceptance of the offer. The web page 1400 illustrates an embodiment in which the vendor sells books via the World Wide Web. A book that the customer is ready to purchase is indicated by text 1402, and a quantity of that book (one book in FIG. 14) is indicated by text 1404. A price of the books is indicated by text 1406, and similarly a total price (e.g. the sum of item prices and any other prices) due from the customer is indicated by text 1408.

A button 1410 is clicked by the customer if the customer desires to purchase the specified items and thereby consummate the purchase. Upon clicking the button 1410, the items may be immediately deemed as having been purchased by the customer. A button 1412 is clicked by the customer if the customer desires to accept an offer for a subsidy. Alternatively, actuating the button 1412 may indicate that the

customer is interested in further information regarding an offer for a subsidy, and the customer may subsequently indicate whether he accepts the offer.

Referring to FIG. 15, a second exemplary web page 1500 allows the customer to provide customer information via a form having fields 1502 that receive entered text. The customer information is used in applying for a credit card account with a credit card issuer. In one embodiment, the web page 1500 may be displayed after the customer clicks the button 1412 of FIG. 14. Information that is entered via the web page 1500 may be transmitted to the controller 110 upon actuation of a button 1504. Actuation of the button 1504 may furthermore indicate acceptance of the offer for the subsidy. For example, actuation of the button 1504 may indicate a willingness to apply for a credit card account, or that the customer has applied for the credit card account. Conversely, actuation of the button 1506 may indicate rejection of the offer for the subsidy.

Referring to FIG. 16, a flow diagram 1600 illustrates the transfer of funds among parties in accordance with the present invention. A subsidizing vendor 1610 provides an amount 1615 of \$50 to a central service 1620 (i.e. the entity that controls or operates the controller 110). The central service 1620 in turn provides an amount 1625 of \$45 to a vendor 1630. The vendor 1630 in turn provides an amount 1635 of \$42 to its customer 1640. In the illustrated flow diagram 1600, the central service 1620 and the vendor 1630 each retain a portion of the funds received from the subsidizing vendor 1610. In particular, the central service 1620 retains \$5 ($\$5 = \$50 - \45) and the vendor 1630 retains \$3 ($\$3 = \$45 - \42). The difference between the funds received by a party ("funds in") and the funds provided by a party ("funds out") in connection with a subsidy may depend on various criteria. In one embodiment, the

funds out are a predetermined amount less than the funds in. For example, the central service 1620 may deduct \$5 from each amount provided by the subsidizing vendor 1610. In another embodiment, the funds out are a predetermined percentage of the funds in. For example, the vendor 1630 may deduct 5% of the funds in, and thus the funds out from the vendor would be 95% of the funds in to the vendor. Those skilled in the art will realize still other ways to calculate the difference between the funds received by a party and the funds provided by a party in connection with a subsidy.

The amount of funds that are retained by the vendor 1630 may be based on the amount provided by the subsidizing vendor 1610 and the purchase price of the customer 1640. For example, if the subsidizing vendor 1610 is willing to provide \$50, yet the customer's purchase price is only \$20, the difference of \$30 ($\$30 = \$50 - \$20$) may be retained by the central service 1620 and/or the vendor 1630. The \$30 may be allocated among the two parties 1620 and 1630 in numerous manners. For example, one party may retain a fixed amount (e.g. \$5) and the other party retains the remainder.

In one embodiment, the central service 1620 retains the excess between the purchase price of the customer and the amount provided by the subsidizing vendor. This amount may be used to augment other offers for subsidies. For example, if a subsidizing vendor is willing to provide \$50 per customer, and a first customer's purchase price is only \$20, then the difference of \$30 may be retained by the subsidizing vendor. A second customer having a purchase price of \$80 could then receive his items for free, since the subsidy of \$50 together with the retained \$30 can offset the \$80 purchase price.

Similarly, the amounts retained from numerous transactions may be used to offset other purchase prices. The amounts retained may be collected into a "pool" of

funds with which to increase specific subsidy amounts, e.g., subsidy amounts for purchase prices which exceed a base subsidy amount. Furthermore, historical data on past transactions can permit efficient selection of future transactions that should receive "augmented" subsidy amounts from the pool of funds. For example, historical data can

5 indicate the average transaction amount expected, as well as the expected number of subsequent transactions that will be in a predetermined range of prices. Thus, the most efficient allocation of the pool of funds among future transactions may be determined a priori.

Referring to FIGS. 17A and 17B, a flow chart 1700 illustrates another

10 embodiment of a method for providing an offer for a benefit to a customer that is to purchase items from a vendor. The controller 110 receives an indication that the customer is ready to purchase items from the web site of a first vendor (step 1702). A customer may indicate his readiness to purchase by, for example, selecting items to purchase and actuating a specific button that consummates the purchase of the items.

15 Before the customer purchases the items, the controller 110 transmits to the vendor server an indication of an offer for a subsidy from a second vendor (step 1704). Subsequently, a response from the customer is received (step 1706) via the vendor server. For example, the customer may verbally indicate his response to a cashier, the cashier actuates a corresponding button on his POS terminal, and the POS terminal

20 transmits a signal representing the response to the vendor server.

If it is determined that the offer is not accepted (step 1708), then the transaction is processed conventionally (step 1710). If however it is determined that the offer is accepted (step 1708), then customer information is received (step 1712).

Such customer information may be used in providing or facilitating an additional transaction that is required of the customer in exchange for the subsidy.

In one embodiment described in further detail below, in exchange for the subsidy the customer agrees to initiate a new service agreement, so that a service is
5 provided by the second vendor. Accordingly, the customer information may comprise an indication of a service that is provided to the customer (e.g. whether the customer has cable television service), or a service provider that provides a service to the customer (e.g. which company provides cable television service to the customer). The additional transaction may occur after a significant amount of time has elapsed.
10 Accordingly, in one embodiment there is a means for determining if the future action has occurred.

Furthermore, a penalty may be assessed against the customer if the customer does not perform the required additional transaction. For example, the subsidy to the customer may be canceled and the transaction may then be processed
15 conventionally. Alternatively, a penalty fee may be charged to the customer.

Similarly, a penalty could be assessed if another imposed condition is violated. For example, a penalty could be assessed if the items are purchased and then returned. Similarly, a returnable purchase could be made a non-returnable purchase in exchange for the subsidy or other benefit. Still another penalty would be to prevent the
20 customer from receiving subsidies from any merchant in the future. Such "blacklisting" could be readily administered by the central controller 110, which can store, for each customer, an indication of whether the customer has been blacklisted and subsequently identify customers that have been blacklisted.

The customer information may be received from the customer. In one embodiment, the controller 110 can send a request via the vendor server that the customer provide customer information. For example, the controller 110 may transmit a form (e.g. via a web site) including questions to be answered. In response, the vendor server would receive answers to the questions, and these answers would constitute the customer information from the customer.

In another embodiment, the customer information may be received from a party other than the customer. For example, information regarding the customer may be received from a third-party database (e.g. a list of addresses to provide a location of the customer, a credit reporting agency). Alternatively, customer information may be received from an ISP (Internet Service Provider), which can provide information such as an Internet address (e.g. email address or IP address) of the customer.

In still another embodiment, the customer information may be received via a "cookie" stored on a customer terminal (e.g. a computer of the customer). Those skilled in the art will understand that a great variety of data may be stored in such cookies, and information may be stored in the cookie in response to various events such as the web sites that have been visited by the customer.

In another embodiment, the customer information may comprise the telephone number of the customer, as determined from an ANI (Automatic Number Identification) signal received from a telephone the customer has used.

Once customer information is received, it may be stored by the controller in the customer database 230 (FIG. 2). Accordingly, information stored in this manner would be more readily accessible in the future, even by new vendors and subsidizing vendors that had not previously interacted with the customer.

The controller 110 may verify whether the customer information is accurate and complete (step 1714). For example, if the information is provided by the customer, it can be advantageous to assure that the customer information is not false. To provide a further incentive for the customer to provide accurate customer information, a penalty may be assessed against the customer if the customer information is not accurate. For example, if it is determined that the customer information is not accurate (step 1716), the subsidy to the customer may be canceled and the transaction is processed conventionally (step 1710). Alternatively, a penalty fee may be charged to the customer if it is determined that the customer information is not accurate. In such an embodiment, it may be further advantageous to verify the customer information before the purchase is consummated. Thus, the threat that the subsidy will not be forthcoming can encourage the customer to provide accurate and complete information.

If it is determined that the customer information is accurate (step 1716), then the controller 110 determines the amount of the subsidy (step 1718). The subsidy amount is typically stored in the offer rules database 270 (FIG. 2). The subsidy amount may be, for example, a predetermined amount or a predetermined percentage (e.g. a predetermined percentage of the total price). In one embodiment, the subsidy amount may also be limited, such that the price charged cannot be lower than zero (i.e. the subsidy may not include a credit). For example, a subsidy amount may be "up to \$100 off, but no more than the total price". The subsidy amount is provided to the first vendor (step 1720) as described above with respect to step 1312 of FIG. 13.

Referring to FIGS. 18A and 18B, a flow chart 1800 illustrates another embodiment of a method for providing an offer for a benefit to a customer that is to

purchase items from a first vendor. The controller 110 receives a signal via the vendor server indicating that the customer is ready to "check out" his virtual "shopping cart" of items on a web site of the first vendor (step 1802). As is understood by those skilled in the art, a shopping cart of items on a web site defines a set of items the customer desires to purchase. Checking out the shopping cart indicates a desire to proceed with purchasing the selected items. Those skilled in the art will understand that there are still other ways for a customer to indicate that he is to purchase items.

Before the customer purchases the items, the controller 110 transmits to the vendor server an offer for a reduction in the total price in exchange for signing up for a service with a second vendor (step 1804). For example, the service may be telephone service, Internet service, banking services, credit card account services, insurance service, securities trading service, satellite television service, or cable television service. Accordingly, the second vendor would be a provider of such services, and the customer would be requested to participate in a transaction (e.g. initiate a service agreement with) with the second vendor.

Subsequently, a response from the customer is received (step 1806) via the vendor server. If it is determined that the offer is not accepted (step 1808), then the transaction is processed conventionally (step 1810). If however it is determined that the offer is accepted (step 1808), then a current service provider of the customer (i.e. a party that provides a specified service to the customer) is determined (step 1812). The customer may be asked to provide information of the current provider, or this information may be determined from other sources. For example, one or more databases may be accessed to determine the long distance telephone service provider of

the customer. Alternatively, the second vendor may allow access to a database of its existing customers to ascertain whether the customer is included in that database.

If it is determined that the customer has a service provider (step 1814), and it is determined that the second vendor already provides the customer with the specified service (step 1816), then the transaction is processed conventionally (step 1810). If it is determined that the customer has a service provider (step 1814), but it is determined that the second vendor does not provide the customer with the specified service (step 1816), then the customer must have a service agreement with another service provider. Accordingly, the existing service agreement is canceled (step 1818).

If it is determined that the customer does not have a service provider of the specified service at all (step 1814), (or if the controller 110 will cancel or has canceled the existing service agreement) then a new service agreement is initiated with the second vendor (step 1820). Thus, the second vendor has acquired a new customer, either by signing up the customer for a new service or by switching providers of the specified service that is provided to the customer. In exchange, the total price of the shopping cart of items is reduced by the amount of the subsidy (step 1822), and controller 110 directs the vendor server to sell the items for this reduced total price (step 1824).

Referring to FIG. 19, a flow chart 1900 illustrates another embodiment of a method for providing an offer for a benefit to a customer that is to purchase items from a first vendor. The controller 110 receives an indication that the customer is ready to purchase items from a first vendor (step 1902). The controller 110 may also receive customer information (step 1904), as described above. The customer information may

comprise, for example, a location of the customer or a current service provider of the customer.

A set of subsidies for which the customer may be eligible is determined (step 1906). In one embodiment, the set of subsidies is determined based on customer information. For example, upon reference to the customer information, one or more offer rules may be satisfied. The subsidies corresponding to the satisfied rules would then be included in the set of subsidies. In another embodiment, the offer rules may be satisfied without reference to customer information. For example, an offer rule may be satisfied if the total price of the items (or the price of any of the item) is greater than (or less than) a predetermined threshold. An offer rule may also be satisfied if a particular item is purchased. In yet another embodiment, one or more subsidizing vendors may be contacted, customer information may be transmitted to the subsidizing vendors, and in response the subsidizing vendors may transmit to the controller 110 a description of a subsidy to offer. In still another embodiment, a subsidizing vendor may be selected (e.g. based on a preferential ranking) and a subsidy from this subsidizing vendor is selected.

Offers for each of the subsidies may be provided to the customer (step 1908) for the customer to select one (or more). For example, each offer may be listed on a web page, and the customer must click a hyperlink corresponding to his desired offer. The offers may be provided substantially simultaneously, allowing the customer to evaluate all offers before selecting an offer. Alternatively, the offers may be provided sequentially to the customer. In such an embodiment, the customer would be provided with additional offers only after rejecting one or more offers provided to him. The order in which offers are provided may be determined by the rank of each

subsidizing vendor that provides the offer. The controller 110 may ascertain the rank of each offer by referencing the field 728 (FIG. 7) for each subsidizing vendor that provides the offer. The offers could then be provided in a sequence defined by the rank of each offer.

5 The customer selection is received (step 1910) and the corresponding subsidy amount is transferred to the first vendor (step 1912). Alternatively, the customer may be similarly prompted to select a vendor from a plurality of vendors, and the customer would subsequently be provided with an offer for a subsidy from the selected vendor.

10 The controller 110 may select one (or more) offers to provide to a customer based on various criteria. For example, the offer with the highest historical acceptance rate may be selected. The historical acceptance rate may be calculated based on data derived from the fields 1022 and 1024 (FIG. 10). Similarly, the offer with the highest profit (e.g., to the vendor or subsidizing vendor) may be selected.

15 The customer may select two or more offers, thereby generally receiving more of a benefit than if he had selected only one offer. For example, the customer may select offers that require him to (i) sign up for a particular credit card account, (ii) sign up for a particular satellite television service, and (iii) switch to a new provider of cellular telephone service. The controller 110 could charge the accounts of each of
20 three subsidizing vendors, and the aggregate amount charged could be used to reduce the price charged to a customer for a purchase.

 The customer described herein may, in one embodiment, comprise a group of customers such as a group dining at a restaurant. In such an embodiment, an offer may be accepted by a plurality of customers. For example, if an offer for a

subsidy includes a \$75 subsidy amount, then if two customers accept the price of the purchase may be reduced by \$150 ($\$150 = \75×2).

Referring to FIGS. 20A and 20B, a flow chart 200 illustrates another embodiment of a method for providing an offer for a benefit to a customer that is to purchase items from a first vendor. Specifically, in the illustrated embodiment a customer may be allowed to add more items if a subsidy amount of an offer exceeds the total price of the items he had already selected.

The vendor server receives an indication that the customer is to purchase a first set of items from the vendor (step 2002). The vendor server then transmits the indication of the items to the controller 110 (step 2004). In response, the controller 110 transmits and the vendor server receives an indication of an offer for a subsidy from a subsidizing vendor (step 2006). This indication may include an indication of a subsidy amount.

The vendor server provides the customer with an offer for a subsidy (step 2008). A response to the offer is received (step 2010). If it is determined that the offer is not accepted (step 2012), then the transaction is processed conventionally (step 2014).

If it is determined that the offer is accepted (step 2012), then an indication of the acceptance is transmitted to the controller 110 (step 2016). If the subsidy amount is greater than the total price of the set of items (step 2018), then the transaction is suspended (step 2020) and the customer is instructed to select an additional set of items (step 2022). The customer may be instructed in the same way the customer may be provided with an offer for a subsidy. For example, a POS terminal may display a textual representation of the instructions, which is read by the

customer or read to the customer by a cashier. In another embodiment, a web page may display text describing the instructions.

Subsequently, the vendor server receives an indication of a second set of items the customer has selected (step 2024). The second set and the first set are then purchased for a reduced purchase price. The customer is charged a reduced price (step 2026) which may be zero (e.g. if the subsidy amount exceeds the sum of the prices of the first and second sets of items).

Referring to FIG. 21, a table 2100 illustrates data used in another embodiment of the present invention in which a subsidy amount may be applied over time. The table 2100 represents information that may be stored in the customer database 230 and/or the customer database 330. Use of the information in the table 2100 is described in detail below with respect to FIG. 22. A customer identifier 2102 uniquely identifies a customer who is due to receive the subsidy amount over time. Credit card information 2104, such as a credit card number and account type, specify an account which may be repeatedly credited to grant the customer the benefit due. The number of credits remaining 2106, frequency 2108 and next credit date 2110 specify when the customer may receive another credit to his account. The amount credited to the specified credit card account is indicated by reference numeral 2112.

Referring to FIG. 22, a flow chart 2200 illustrates another embodiment of a method for providing an offer for a benefit to a customer. Specifically, in the illustrated embodiment a subsidy amount is applied over time by repeatedly crediting a credit card account. After the credit card account is credited (step 2202), the controller 110 sets the next credit date (step 2203) which may be readily calculated from the current date and the frequency 2108 (FIG. 21). The controller 110 then waits until the

next credit date (step 2204) and determines whether there are any more credits to apply (step 2206). If there are more credits remaining, then the controller 110 also determines whether the customer has met all of his obligations (step 2208). For example, the customer may have been required to sign up for and maintain a cellular telephone account with a particular subsidizing vendor. In such a situation, the controller 110 would determine whether the customer has canceled the required cellular telephone account. If all obligations have been met by the customer, then the account is credited again (step 2202).

In the above embodiment, additional or unused subsidy amounts may be, e.g., presented to the customer in the form of a store credit (applied against future purchases from the vendor). Alternatively, the unused subsidy amounts may be forfeited.

Although the present invention has been described with respect to a preferred embodiment thereof, those skilled in the art will note that various substitutions may be made to those embodiments described herein without departing from the spirit and scope of the present invention.

What is claimed is:

- 1 1. A method, comprising the steps of:
2 receiving an indication of at least one item that a customer is to purchase from a
3 first vendor;
4 transmitting, in response to the received indication of the at least one item, an
5 indication of an offer for a subsidy from a second vendor, the step of transmitting an
6 indication of the offer being performed before the at least one item is purchased;
7 receiving an indication that that the customer accepts the offer;
8 providing an amount of funds to the first vendor; and
9 facilitating a transaction between the customer and the second vendor.
- 1 2. The method of claim 1, in which the step of facilitating the transaction between
2 the customer and the second vendor comprises:
3 providing a hyperlink to a predetermined web site.
- 1 3. The method of claim 1, in which the step of facilitating the transaction between
2 the customer and the second vendor comprises:
3 transmitting a form for receiving information.
- 1 4. The method of claim 1, in which the step of facilitating the transaction between
2 the customer and the second vendor comprises:
3 determining a service provider that provides a service to the customer.

1 5. The method of claim 4, in which the step of facilitating the transaction between
2 the customer and the second vendor comprises:
3 canceling a service agreement with the service provider.

1 6. The method of claim 4, in which the step of facilitating the transaction between
2 the customer and the second vendor comprises:
3 initiating a new service agreement so that the service is provided by the second
4 vendor.

1 7. The method of claim 4, in which the step of determining a service provider that
2 provides a service to the customer comprises:
3 determining whether the service is provided by the second vendor.

1 8. The method of claim 1, in which the step of facilitating the transaction between
2 the customer and the second vendor comprises:
3 switching providers of a service that is provided to the customer.

1 9. The method of claim 8, in which the service comprises at least one of:
2 telephone service, Internet service, banking services, credit card account
3 services, insurance service, securities trading service, satellite television service, and
4 cable television service.

1 10. The method of claim 1, in which the step of facilitating the transaction between
2 the customer and the second vendor comprises:

3 initiating a new service agreement so that a service is provided to the customer.

1 11. The method of claim 10, in which the service comprises at least one of:
2 telephone service, Internet service, banking services, credit card account
3 services, insurance service, securities trading service, satellite television service, and
4 cable television service.

1 12. The method of claim 1, in which the step of transmitting an indication of an
2 offer comprises:
3 transmitting an indication of an offer for a subsidy from a plurality of vendors;
4 and in which the step of facilitating a transaction comprises:
5 facilitating transactions between the customer and the plurality of vendors.

1 13. A method, comprising the steps of:
2 receiving an indication of at least one item that a customer is to purchase from a
3 first vendor via a web site;
4 selecting a subsidy from a plurality of subsidies;
5 transmitting, in response to the received indication of the at least one item, an
6 indication of an offer for the subsidy from a second vendor, the step of transmitting an
7 indication of the offer being performed before the at least one item is purchased;
8 receiving an indication that the customer accepts the offer;
9 receiving a first amount of funds from the second vendor;
10 providing a second amount of funds to the first vendor; and
11 facilitating a transaction between the customer and the second vendor.

1 14. The method of claim 13, in which the step of selecting a subsidy from a
2 plurality of subsidies comprises:

3 selecting a vendor from a plurality of vendors; and
4 selecting a subsidy from the selected vendor.

1 15. The method of claim 13, in which the step of selecting a subsidy from a
2 plurality of subsidies comprises:

3 selecting a subsidy from a plurality of subsidies based on the at least one item.

1 16. The method of claim 15, in which the step of selecting a subsidy from a
2 plurality of subsidies comprises:

3 selecting a subsidy from a plurality of subsidies based on a price of the at least
4 one item.

1 17. The method of claim 13, in which the step of selecting a subsidy from a
2 plurality of subsidies comprises:

3 selecting at least two subsidies from a plurality of subsidies based on the at least
4 one item.

1 18. The method of claim 13, in which the step of transmitting an indication of the
2 offer for the subsidy from the second vendor comprises:

3 transmitting an indication of at least two offers for subsidies from a second
4 vendor.

- 1 19. The method of claim 18, further comprising:
2 receiving from the customer a selection of at least one offer of the at least two
3 offers.
- 1 20. The method of claim 13, in which the step of receiving the first amount of funds
2 from the second vendor comprises:
3 charging the first amount to an account corresponding to the second vendor.
- 1 21. The method of claim 13, in which the step of receiving the first amount of funds
2 from the second vendor comprises:
3 initiating a transfer of funds from an account corresponding to the second
4 vendor.
- 1 22. The method of claim 13, in which the step of providing the second amount of
2 funds to the first vendor comprises:
3 crediting an account corresponding to the first vendor.
- 1 23. The method of claim 13, in which the step of providing the second amount of
2 funds to the first vendor comprises:
3 initiating a transfer of funds to an account corresponding to the first vendor.
- 1 24. The method of claim 13, in which the step of transmitting an indication of an
2 offer comprises:
3 transmitting an indication of an offer for a subsidy from a plurality of vendors;

4 and in which the step of receiving a first amount of funds from the second vendor
5 comprises:
6 receiving a portion of the first amount of funds from each of the plurality of
7 vendors;
8 and in which the step of facilitating a transaction comprises:
9 facilitating transactions between the customer and the plurality of vendors.

1 25. The method of claim 13, in which the step of receiving the first amount of funds
2 from the second vendor comprises:
3 charging a third amount to a first account corresponding to the second vendor;
4 and
5 charging a fourth amount to a second account corresponding to a third vendor,
6 in which the first amount is a sum of the third amount and the fourth amount.

1 26. The method of claim 13, in which the step of receiving the first amount of funds
2 from the second vendor comprises:
3 initiating a transfer of a third amount of funds from a first account
4 corresponding to the second vendor; and
5 initiating a transfer of a fourth amount of funds from a second account
6 corresponding to a third vendor,
7 in which the first amount is a sum of the third amount and the fourth amount.

1 27. The method of claim 13, further comprising:
2 calculating the second amount of funds based on the first amount of funds.

1 28. The method of claim 13, in which the second amount of funds is based on a
2 predetermined amount less than the first amount of funds.

1 29. The method of claim 13, in which the second amount of funds is based on a
2 predetermined percentage of the first amount of funds.

1 30. The method of claim 13, in which the indication of the offer for the subsidy
2 comprises:
3 an indication of a subsidy amount, and
4 an indication of a transaction the customer is required to perform in exchange
5 for receiving the subsidy amount.

1 31. A method, comprising the steps of:
2 transmitting an indication of at least one item that a customer is to purchase, the
3 at least one item having an associated total price;
4 receiving, in response to the transmitted indication of the at least one item, an
5 indication of an offer for a subsidy from a vendor;
6 providing to the customer, in response to the received indication of the offer, the
7 offer for the subsidy, the step of providing the offer being performed before the item is
8 purchased;
9 receiving from the customer an acceptance of the offer;
10 transmitting an indication of the acceptance of the offer; and
11 charging the customer a second price for the at least one item, the second price
12 being less than the total price.

1 32. The method of claim 31, in which the step of providing to the customer the offer
2 for the subsidy comprises:

3 displaying text that represents the offer.

1 33. The method of claim 31, in which the step of charging the customer the second
2 price for the at least one item comprises:

3 crediting an amount of funds to an account, the amount of funds being based on
4 a difference between the total price and the second price.

1 34. The method of claim 33, in which the step of crediting comprises:

2 crediting the amount of funds to a credit card account.

1 35. The method of claim 33, in which the step of crediting the amount of funds to
2 the account comprises:

3 crediting a first amount of funds to the account; and

4 crediting a second amount of funds to the account.

1 36. The method of claim 35, in which the step of crediting the second subsidy
2 amount to the account is performed at least a predetermined time after the step of
3 crediting the first subsidy amount to the account is performed.

1 37. The method of claim 31, in which the step of charging the customer the second
2 price for the at least one item comprises:

3 charging the second price to an account.

1 38. The method of claim 37, in which the step of charging comprises:
2 charging the total price to a credit card account.

1 39. The method of claim 31, in which the step of charging the customer the second
2 price for the at least one item comprises:
3 transmitting a request to purchase an additional item;
4 receiving an indication of an additional item that a customer is to purchase, the
5 at least one item having an associated second price;
6 charging the customer the second price for the at least one item and the
7 additional item, the second price being less than a sum of the total price and the second
8 price.

1 40. The method of claim 31, further comprising:
2 receiving an credit card identifier that identifies a credit card account.

1 41. The method of claim 31, further comprising:
2 receiving an amount of funds from the vendor.

1 42. The method of claim 41, in which the amount of funds is based on a difference
2 between the second price and the total price.

1 43. The method of claim 31, further comprising:
2 receiving an amount of funds from a party other than the customer.

- 1 44. The method of claim 31, further comprising:
2 calculating the second price based on the total price.
- 1 45. The method of claim 31, in which the second price is based on a predetermined
2 amount less than the total price.
- 1 46. The method of claim 31, in which the second price is based on a predetermined
2 percentage of the total price.
- 1 47. The method of claim 31, further comprising:
2 facilitating a transaction between the customer and the vendor.
- 1 48. The method of claim 31, in which the step of receiving an indication of an offer
2 comprises:
3 receiving, in response to the transmitted indication of the at least one item, an
4 indication of a plurality of offers for subsidies.
- 1 49. The method of claim 48, in which the step of providing the offer for the subsidy
2 comprises:
3 providing to the customer the offers for the subsidies.
- 1 50. The method of claim 49, in which the step of providing to the customer the
2 offers for the subsidies comprises:

3 providing the offers for the subsidies substantially simultaneously to the
4 customer.

1 51. The method of claim 49, in which the step of providing to the customer the
2 offers for the subsidies comprises:

3 providing the offers for the subsidies sequentially to the customer.

1 52. The method of claim 51, in which the step of providing to the customer the
2 offers for the subsidies comprises:

3 providing a first offer of the plurality of offers to the customer;

4 receiving from the customer a rejection of the first offer; and

5 providing a second offer of the plurality of offers to the customer after receiving
6 the rejection.

1 53. The method of claim 51, further comprising:

2 ascertaining a rank of each offer of the plurality of offers;

3 and in which the step of providing to the customer the offers for the subsidies
4 comprises:

5 providing the offers for the subsidies in a sequence defined by the rank of each
6 offer.

1 54. The method of claim 48, in which the step of providing the offer for the subsidy
2 comprises:

3 selecting at least one offer of the plurality of offers; and

4 providing to the customer the selected at least one offer.

1 55. The method of claim 54, in which the step of selecting at least one offer

2 comprises:

3 selecting the at least one offer based on a historical acceptance rate of each

4 offer.

1 56. The method of claim 54, in which the step of selecting at least one offer

2 comprises:

3 selecting the at least one offer based on a profit of each offer.

1 57. The method of claim 31, in which the indication of the offer for the subsidy

2 comprises:

3 an indication of a subsidy amount, and

4 an indication of a transaction the customer is required to perform in exchange

5 for receiving the subsidy amount.

1 58. The method of claim 57, in which the step of charging comprises:

2 not charging the customer for the at least one item if the subsidy amount is

3 greater than the total price; and

4 crediting an amount of funds to an account, the amount of funds being based on

5 a difference between the total price and the subsidy amount.

1 59. The method of claim 57, in which the step of charging comprises:

charging the customer a second price for the at least one item, the second price being based on a difference between the total price and the subsidy amount.

60. The method of claim 31, in which the second price is zero.

61. An apparatus, comprising:

means for receiving an indication of at least one item that a customer is to purchase from a first vendor;

means for transmitting, in response to the received indication of the at least one item, an indication of an offer for a subsidy from a second vendor, the step of transmitting an indication of the offer being performed before the at least one item is purchased;

means for receiving an indication that the customer accepts the offer;

means for providing an amount of funds to the first vendor; and

means for facilitating a transaction between the customer and the second vendor.

62. An apparatus, comprising:

a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive an indication of at least one item that a customer is to purchase from a first vendor;

8 transmit, in response to the received indication of the at least one item,
9 an indication of an offer for a subsidy from a second vendor, the step of transmitting an
10 indication of the offer being performed before the at least one item is purchased;
11 receive an indication that that the customer accepts the offer;
12 provide an amount of funds to the first vendor; and
13 facilitate a transaction between the customer and the second vendor.

1 63. A computer readable medium encoded with processing instructions for
2 implementing a method performed by a processor, the method comprising the steps of:
3 receiving an indication of at least one item that a customer is to purchase from a
4 first vendor;
5 transmitting, in response to the received indication of the at least one item, an
6 indication of an offer for a subsidy from a second vendor, the step of transmitting an
7 indication of the offer being performed before the at least one item is purchased;
8 receiving an indication that that the customer accepts the offer;
9 providing an amount of funds to the first vendor; and
10 facilitating a transaction between the customer and the second vendor.

1 64. An apparatus, comprising:
2 means for receiving an indication of at least one item that a customer is to
3 purchase from a first vendor via a web site;
4 means for selecting a subsidy from a plurality of subsidies;
5 means for transmitting, in response to the received indication of the at least one
6 item, an indication of an offer for the subsidy from a second vendor, the step of

transmitting an indication of the offer being performed before the at least one item is purchased;

means for receiving an indication that that the customer accepts the offer;

means for receiving a first amount of funds from the second vendor;

means for providing a second amount of funds to the first vendor; and

means for facilitating a transaction between the customer and the second

vendor.

65. An apparatus, comprising:

a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive an indication of at least one item that a customer is to purchase from a first vendor via a web site;

select a subsidy from a plurality of subsidies;

transmit, in response to the received indication of the at least one item, an indication of an offer for the subsidy from a second vendor, the step of transmitting an indication of the offer being performed before the at least one item is purchased;

receive an indication that that the customer accepts the offer;

receive a first amount of funds from the second vendor;

provide a second amount of funds to the first vendor; and

facilitate a transaction between the customer and the second vendor.

1 66. A computer readable medium encoded with processing instructions for
2 implementing a method performed by a processor, the method comprising the steps of:
3 receiving an indication of at least one item that a customer is to purchase from a
4 first vendor via a web site;
5 selecting a subsidy from a plurality of subsidies;
6 transmitting, in response to the received indication of the at least one item, an
7 indication of an offer for the subsidy from a second vendor, the step of transmitting an
8 indication of the offer being performed before the at least one item is purchased;
9 receiving an indication that that the customer accepts the offer;
10 receiving a first amount of funds from the second vendor;
11 providing a second amount of funds to the first vendor; and
12 facilitating a transaction between the customer and the second vendor.

1 67. An apparatus, comprising:
2 means for transmitting an indication of at least one item that a customer is to
3 purchase, the at least one item having an associated total price;
4 means for receiving, in response to the transmitted indication of the at least one
5 item, an indication of an offer for a subsidy from a vendor;
6 means for providing to the customer, in response to the received indication of
7 the offer, the offer for the subsidy, the step of providing the offer being performed
8 before the item is purchased;
9 means for receiving from the customer an acceptance of the offer;
10 means for transmitting an indication of the acceptance of the offer; and

11 means for charging the customer a second price for the at least one item, the
12 second price being less than the total price.

1 68. An apparatus, comprising:
2 a data storage device; and
3 a processor connected to the data storage device,
4 the data storage device storing a program for controlling the processor; and
5 the processor operative with the program to:
6 transmit an indication of at least one item that a customer is to purchase,
7 the at least one item having an associated total price;
8 receive, in response to the transmitted indication of the at least one item,
9 an indication of an offer for a subsidy from a vendor;
10 provide to the customer, in response to the received indication of the
11 offer, the offer for the subsidy, the step of providing the offer being performed before
12 the item is purchased;
13 receive from the customer an acceptance of the offer;
14 transmit an indication of the acceptance of the offer; and
15 charge the customer a second price for the at least one item, the second
16 price being less than the total price.

1 69. A computer readable medium encoded with processing instructions for
2 implementing a method performed by a processor, the method comprising the steps of:
3 transmitting an indication of at least one item that a customer is to purchase, the
4 at least one item having an associated total price;

5 receiving, in response to the transmitted indication of the at least one item, an
6 indication of an offer for a subsidy from a vendor;
7 providing to the customer, in response to the received indication of the offer, the
8 offer for the subsidy, the step of providing the offer being performed before the item is
9 purchased;
10 receiving from the customer an acceptance of the offer;
11 transmitting an indication of the acceptance of the offer; and
12 charging the customer a second price for the at least one item, the second price
13 being less than the total price.

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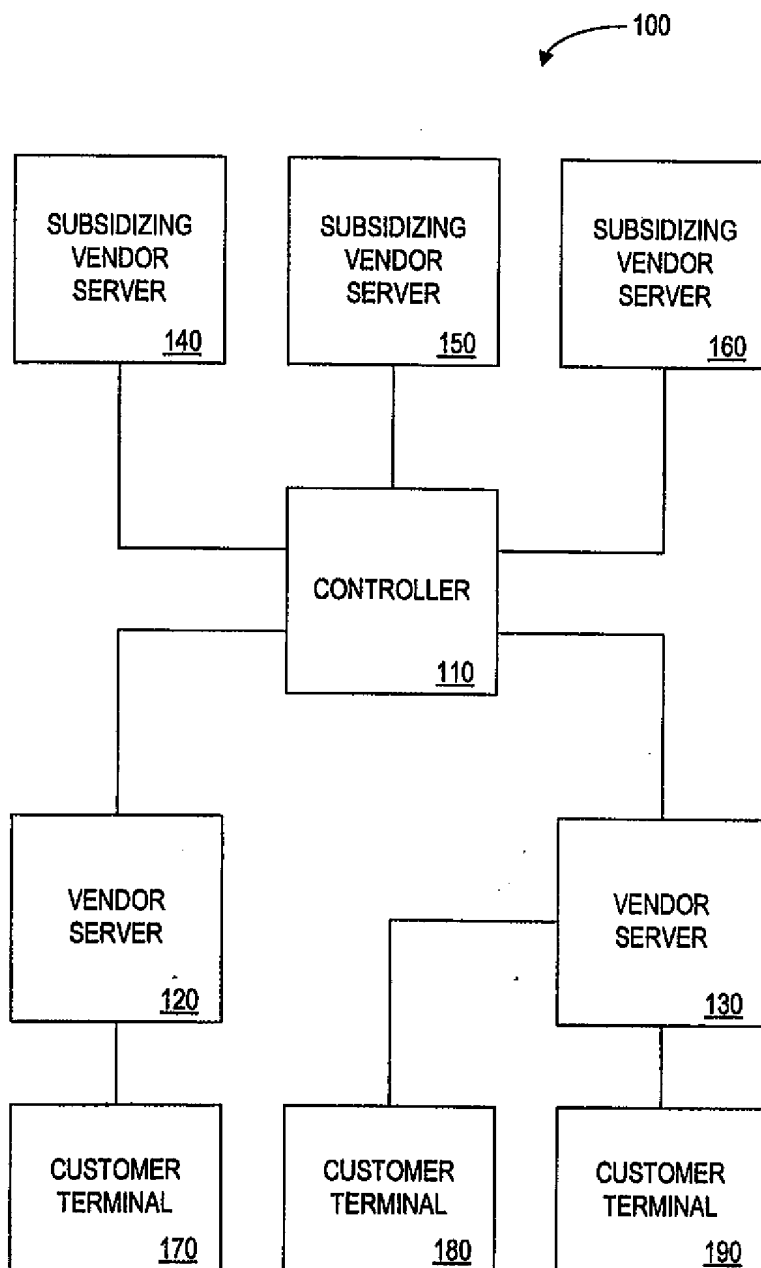


FIG. 1

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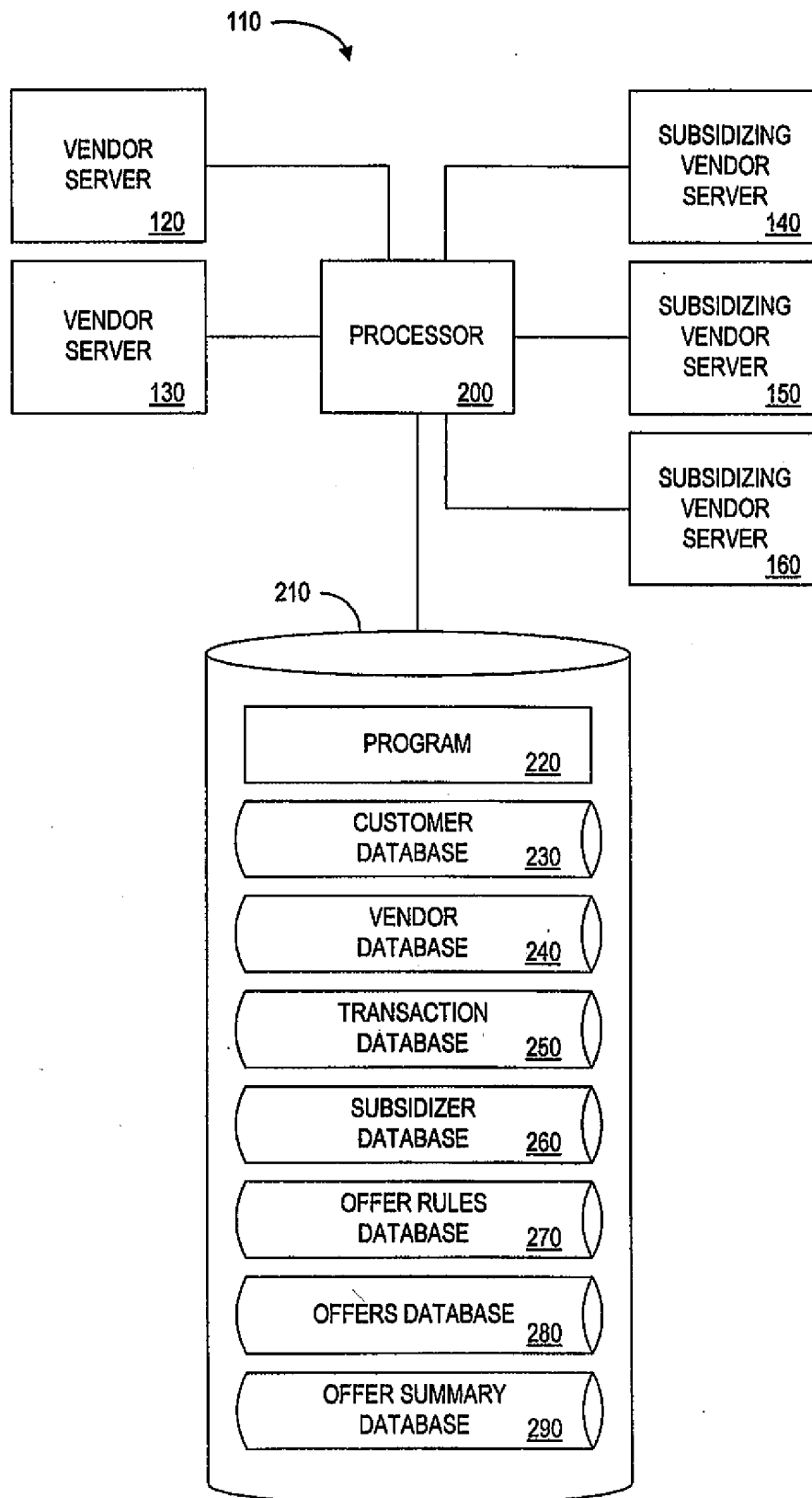


FIG. 2

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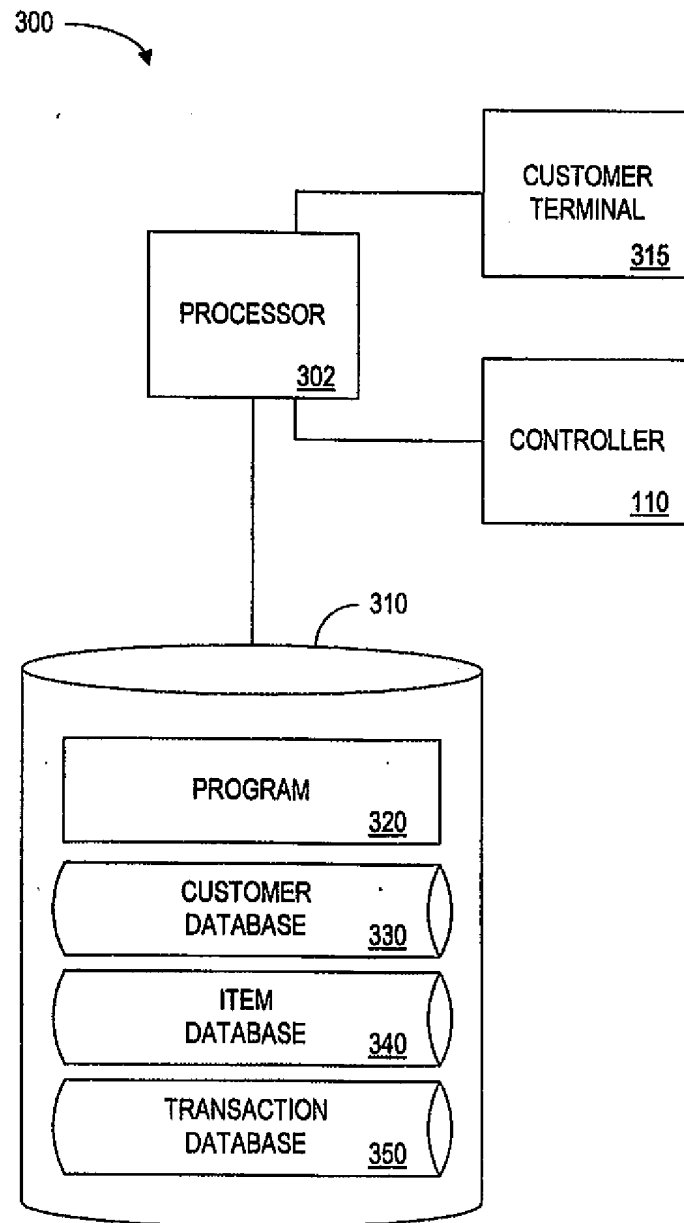


FIG. 3

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400

CUSTOMER IDENTIFIER 420	NAME 422	BILLING ADDRESS 424	CREDIT CARD INFORMATION 426	E-MAIL 428
C0001	DAN MANN	123 MAIN ST.	VISA 1111-1111- 1111-1111	DMANN@ ISP.COM
C0002	STEVE DAVIS	3 RIVERPLACE ROAD	AMEX 4444-5555 6666-3333	SDAVIS@ SCHOOL.EDU
C0003	JEFF SMITH	2 THRUSH LANE	DIS 2222-3333 4444-7777	SMITH@ WEBTV.COM
C0004	GEORGE ALAN	15 LAUREL AVENUE	VISA 1111-4444- 8888-3333	ALAN@ WORK.COM

402
404
406
408

FIG. 4

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500

VENDOR IDENTIFIER <u>520</u>	VENDOR NAME <u>522</u>	VENDOR E-MAIL ADDRESS <u>524</u>	AMOUNT OWED TO VENDOR <u>526</u>
V001	VENDOR X	X@X.COM	\$0.00
V002	VENDOR Y	Y@Y.COM	\$100.00
V003	VENDOR Z	Z@Z.COM	\$987.13
V004	VENDOR Q	Q@Q.COM	\$45.00

FIG. 5

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600

TRANSACTION IDENTIFIER 620	TIME OF TRANSACTION 622	ITEMS ORDERED 624	CREDIT CARD INFORMATION 626	AMOUNT CHARGED 628	DELIVERY ADDRESS 630	CUSTOMER IDENTIFIER 632
T 000 001	1/4/2001 8:07 AM	P038, P049, P812	VISA 1111-1111- 1111-1111 EXP. 3/2002	\$49.87	123 MAIN ST. TOWN, USA	NONE
T 000 002	1/9/2001 9:00 PM	P123	MASTERCARD 2222-2222- 2222-2222 EXP. 9/2002	\$0.00	9876 PARK AVE. CITY, USA	C1234
T 000 003	1/10/2001 3:02 AM	P456, P789, P789	AMEX 9999-9999- 9999-9999 EXP. 4/2005	\$0.00	24 SHADY LA. TOWN, USA	C5678

602

604

606

FIG. 6

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700

SUBSIDIZING VENDOR IDENTIFIER <u>720</u>	SUBSIDIZING VENDOR NAME <u>722</u>	ACCOUNT <u>724</u>	AMOUNT OWED BY SUBSIDIZING VENDOR <u>726</u>	RANK <u>728</u>
S001	CREDIT CARD COMPANY X	BANK ACCOUNT #2345678	\$855.00	1
S002	LONG DISTANCE TELEPHONE Y	MC 1111-2222- 3333-4444	\$4,390.00	2
S003	SATELLITE TELEVISION Z	PREPAID BALANCE \$10,500	\$0	3

702

704

706

FIG. 7

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800

OFFER RULE IDENTIFIER 820	SUBSIDIZING VENDOR IDENTIFIER 822	SUBSIDY AMOUNT 824	WHEN EFFECTIVE 826	ADDITIONAL TRANSACTION REQUIRED 828
R0001	S11	UP TO \$50	ALWAYS	SIGN UP FOR CREDIT CARD ACCOUNT
R0002	S12	UP TO \$50	PURCHASING ITEM P004	SIGN UP FOR CREDIT CARD ACCOUNT
R0003	S12	\$40	CREDIT CARD = VISA AND TOTAL PRICE > \$100	SIGN UP FOR VISA PLUS ACCOUNT
R0004	213	\$80	CUSTOMER IS FROM A NEW ENGLAND STATE	SIGN UP FOR CELLULAR TELEPHONE SERVICE
R0005	S14	\$75	CUSTOMER DOES NOT HAVE CABLE TELEVISION FROM SERVICE PROVIDER	SIGN UP FOR CABLE TELEVISION

802

804

806

808

810

FIG. 8

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900

OFFER IDENTIFIER 920	TRANSACTION IDENTIFIER 922	SUBSIDIZING VENDOR IDENTIFIER 924	OFFER RULE APPLIED 926	SUBSIDY AMOUNT 928	TOTAL PRICE 930	TOTAL PRICE WITH SUBSIDY 932	ACCEPTED 934
F001	T123	S111	R1230	\$50	\$97.12	\$37.12	YES
F002	T456	S222	R4561	\$100	\$19.95	\$19.95	YES
F003	T789	S345	R7892	\$10	\$10.00	\$0	YES
F004	T109	S678	R0123	\$15	\$15.00	\$0	YES
F005	T555	S901	R3454	\$75	\$48.00	\$0	YES

902

904

906

908

910

FIG. 9

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1000

SUBSIDIZING VENDOR IDENTIFIER: S888				1002
TOTAL NUMBER OF OFFERS: 1,794				1004
TOTAL NUMBER OF OFFERS ACCEPTED: 1,003				1006
TOTAL AMOUNT OF SUBSIDIES: \$52,800.00				1008
OFFER RULE IDENTIFIER 1020	NUMBER OF OFFERS 1022	NUMBER OF OFFERS ACCEPTED 1024	AMOUNT OF SUBSIDIES DUE 1026	
R1111	1004	500	\$2,500.00	
R2222	790	503	\$50,300.00	

1010

1012

FIG. 10

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1100

ITEM IDENTIFIER <u>1120</u>	ITEM DESCRIPTION <u>1122</u>	ITEM PRICE <u>1124</u>	AVAILABILITY <u>1126</u>
P001	WAR AND PEACE	\$13.95	IN STOCK
P002	SUN TZU: THE ART OF WAR	\$15.95	AVAILABLE IN 2-3 DAYS

1102

1104

FIG. 11

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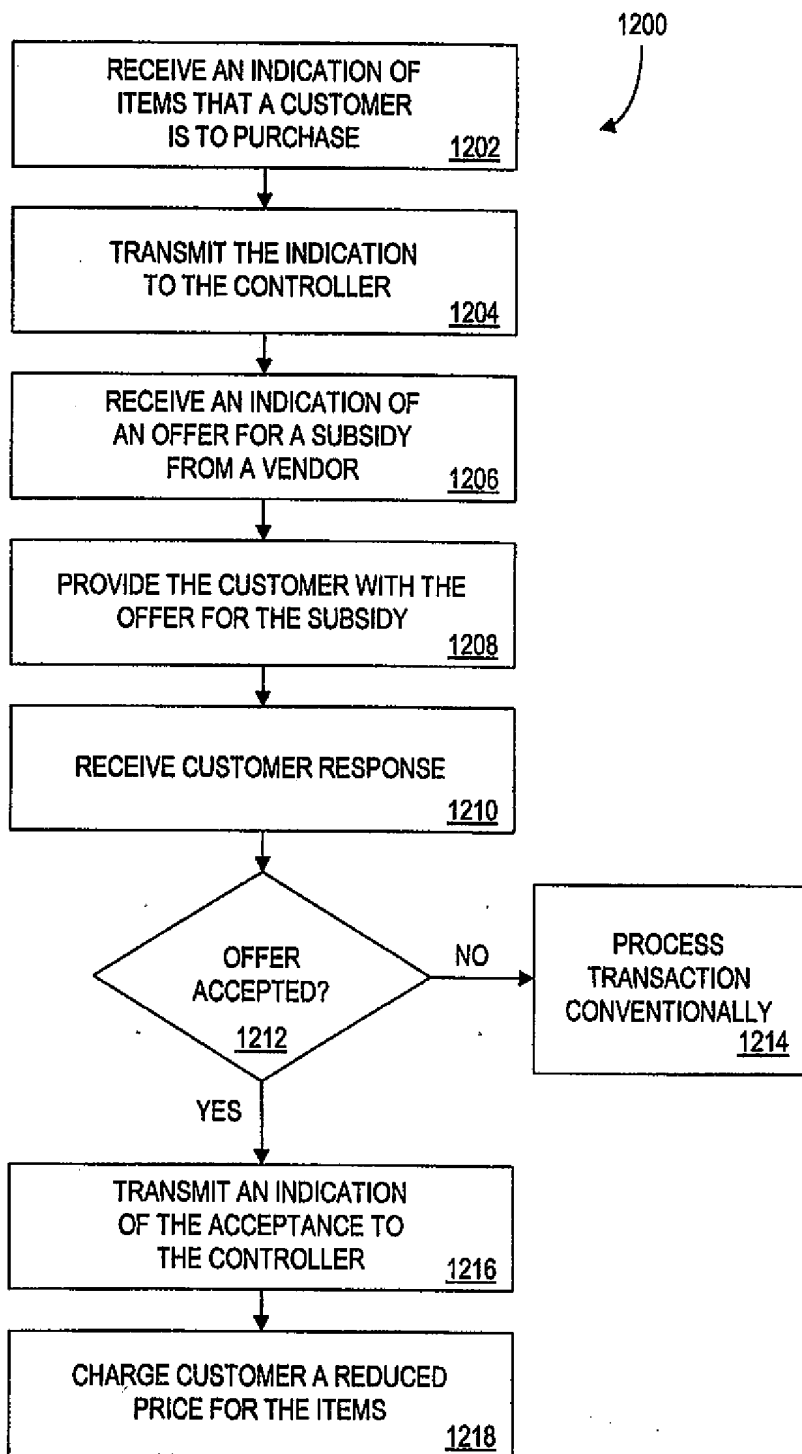


FIG. 12

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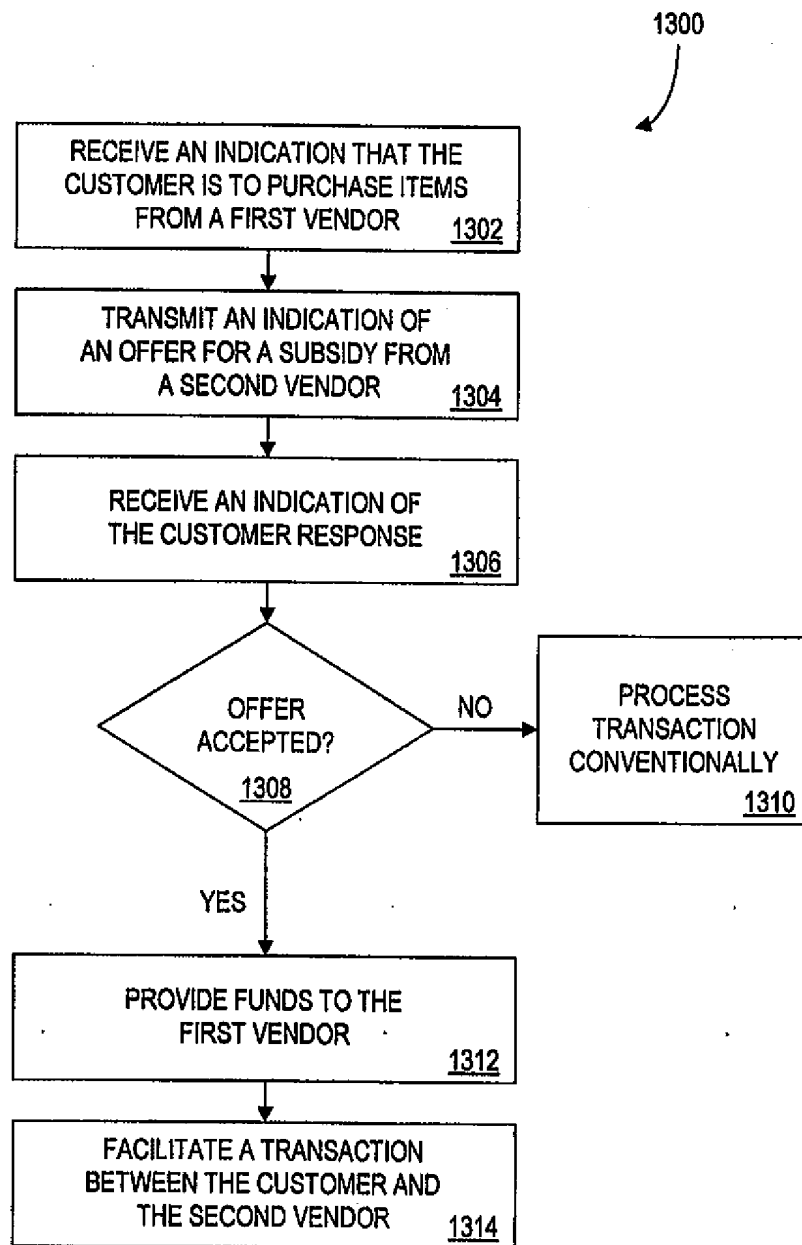


FIG. 13

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1400

QUANTITY AND TITLE INFORMATION
FOR ITEMS IN YOUR SHOPPING CART:

<u>QTY.</u>	<u>TITLE</u>
1	WAR AND PEACE; TOLSTOY, LEO

PRICE \$13.95

SHIPPING \$5.00

TOTAL PRICE \$18.95

CLICK HERE TO SEND
US YOUR ORDER

GET THIS PURCHASE
FOR FREE!

FIG. 14

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1500

**APPLY FOR AN ANYBANK VISA CREDIT CARD
ACCOUNT AND YOUR PURCHASE IS
ABSOLUTELY FREE!**

APPLICATION FOR CREDIT

NAME:	<input type="text"/>
ADDRESS 1:	<input type="text"/>
ADDRESS 2:	<input type="text"/>
CITY, STATE, ZIP	<input type="text"/>
SOC. SEC. NUMBER:	<input type="text"/>
ANNUAL INCOME:	<input type="text"/>

1504

CLICK HERE TO
COMPLETE THE
APPLICATION

1502

1506

BACK TO MY
SHOPPING CART

FIG. 15

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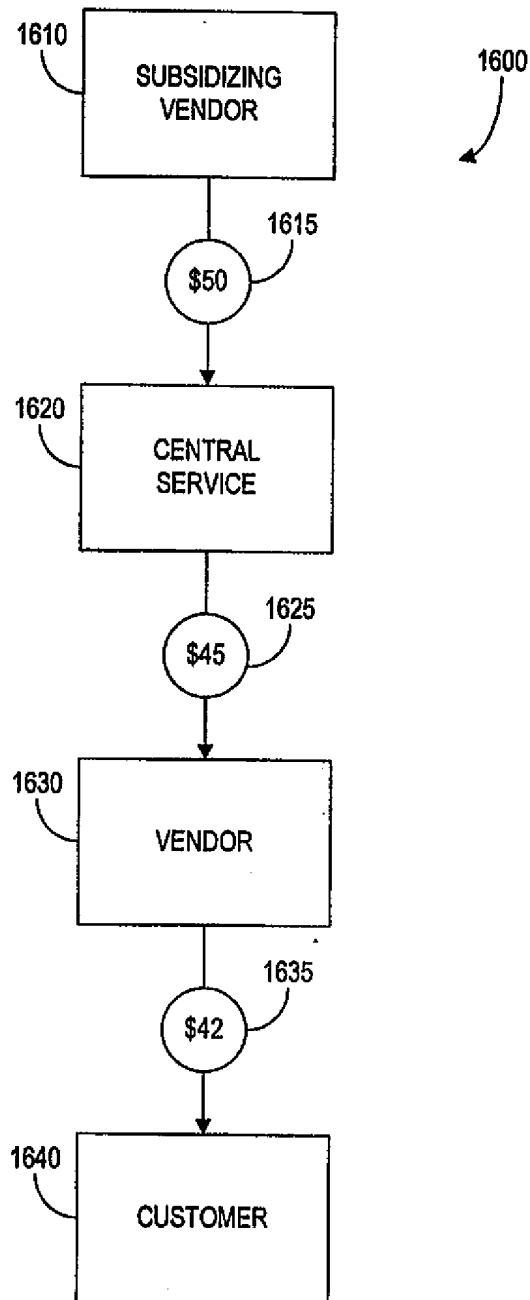


FIG. 16

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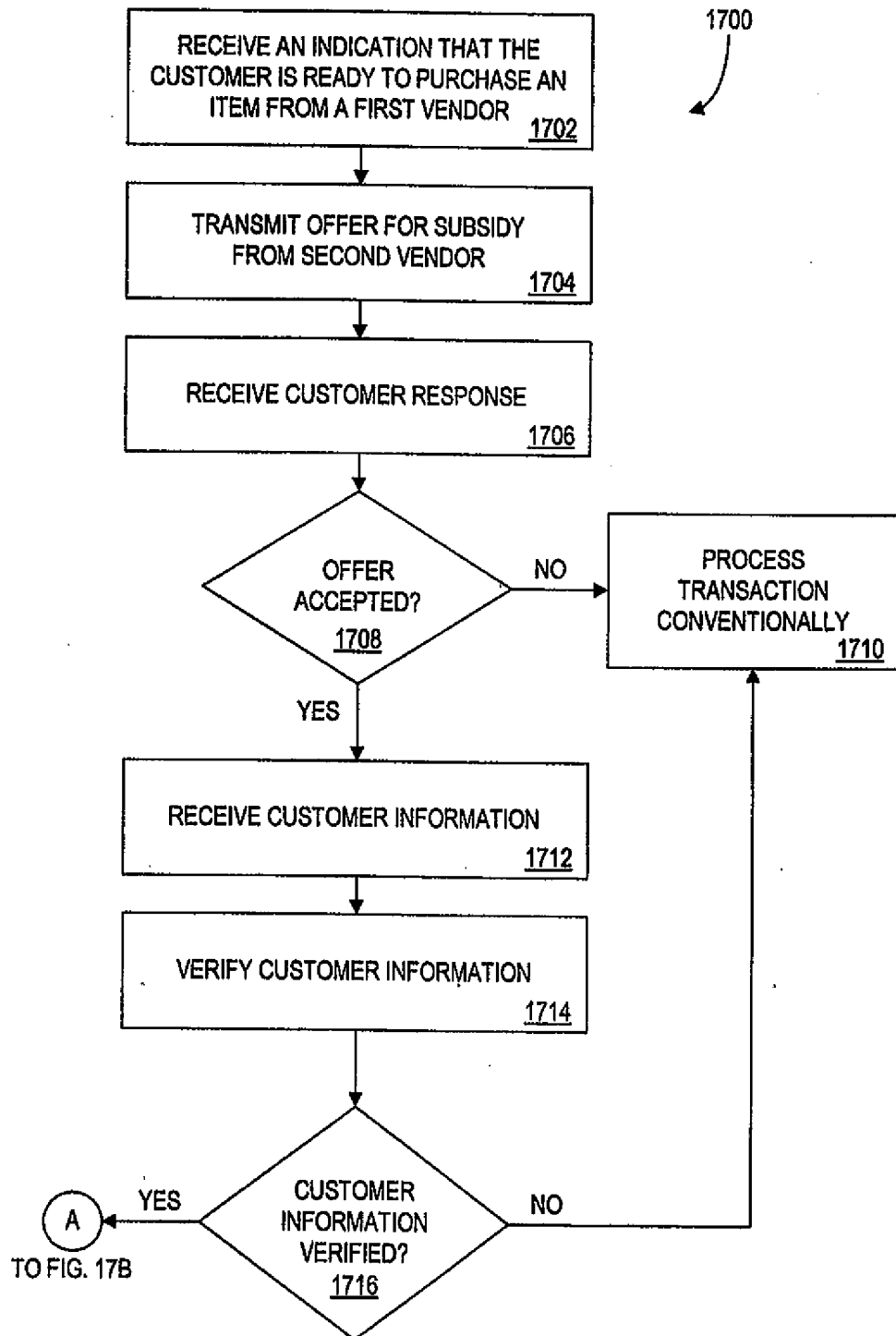


FIG. 17A

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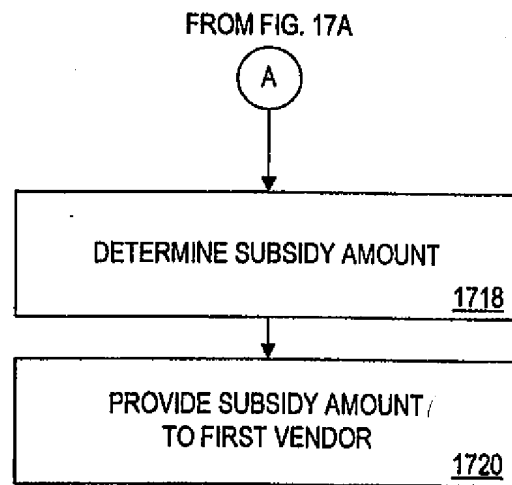


FIG. 17B

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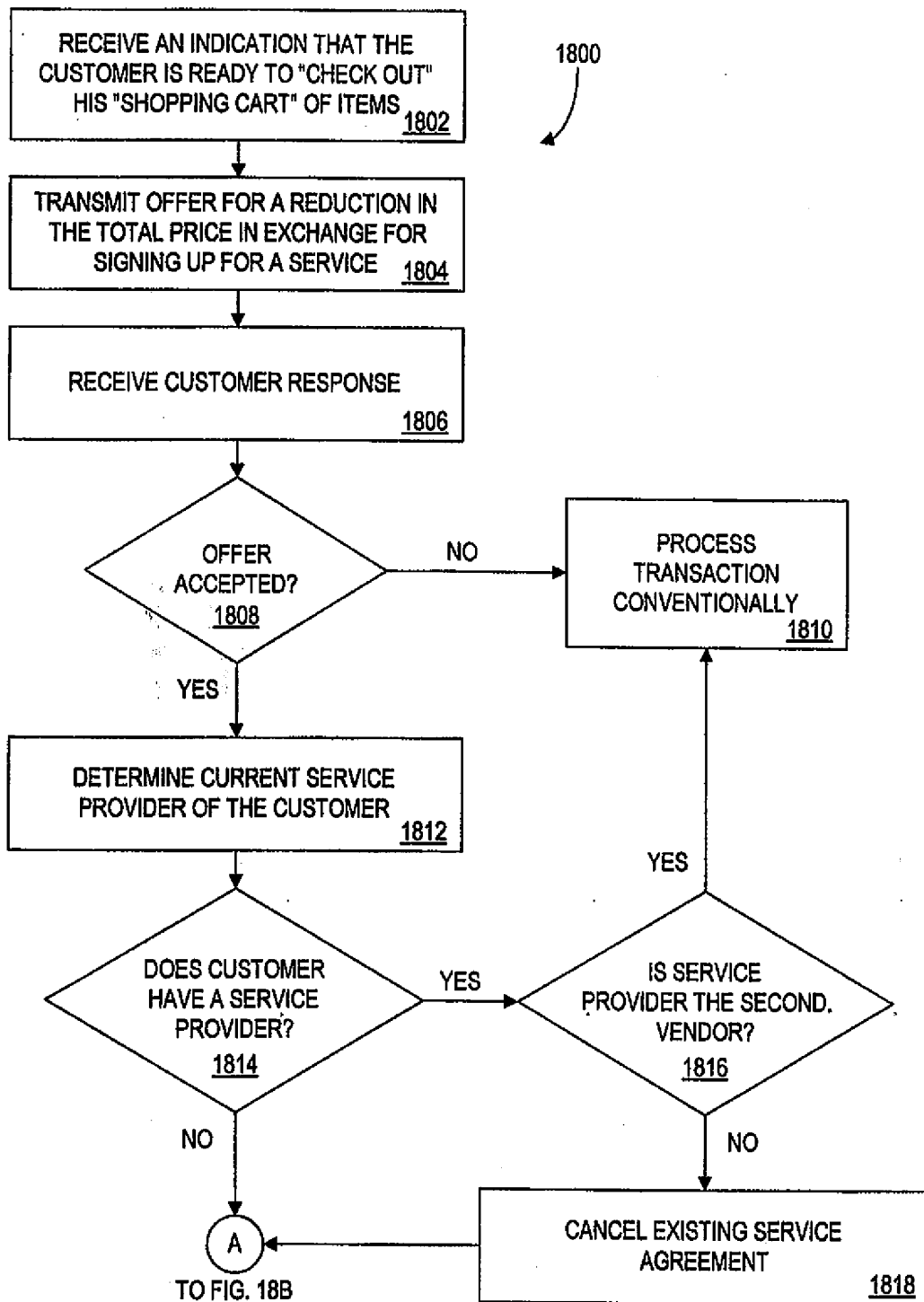


FIG. 18A

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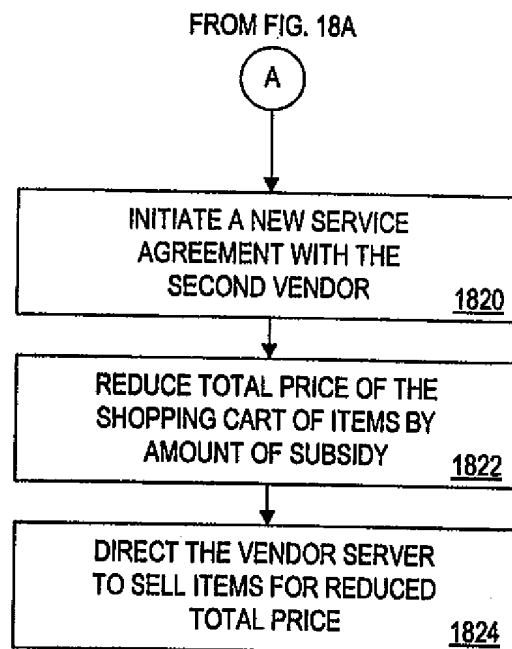


FIG. 18B

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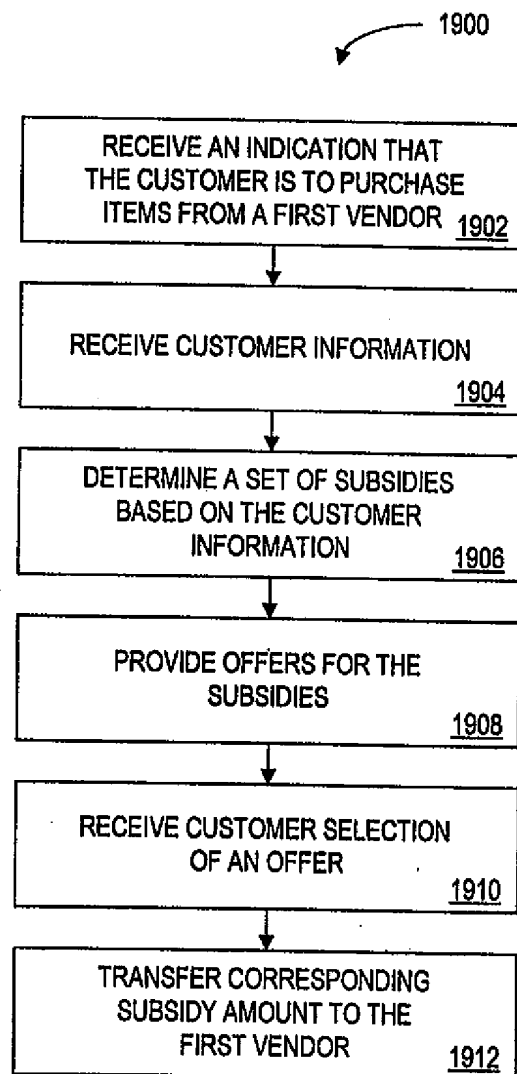


FIG. 19

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2000

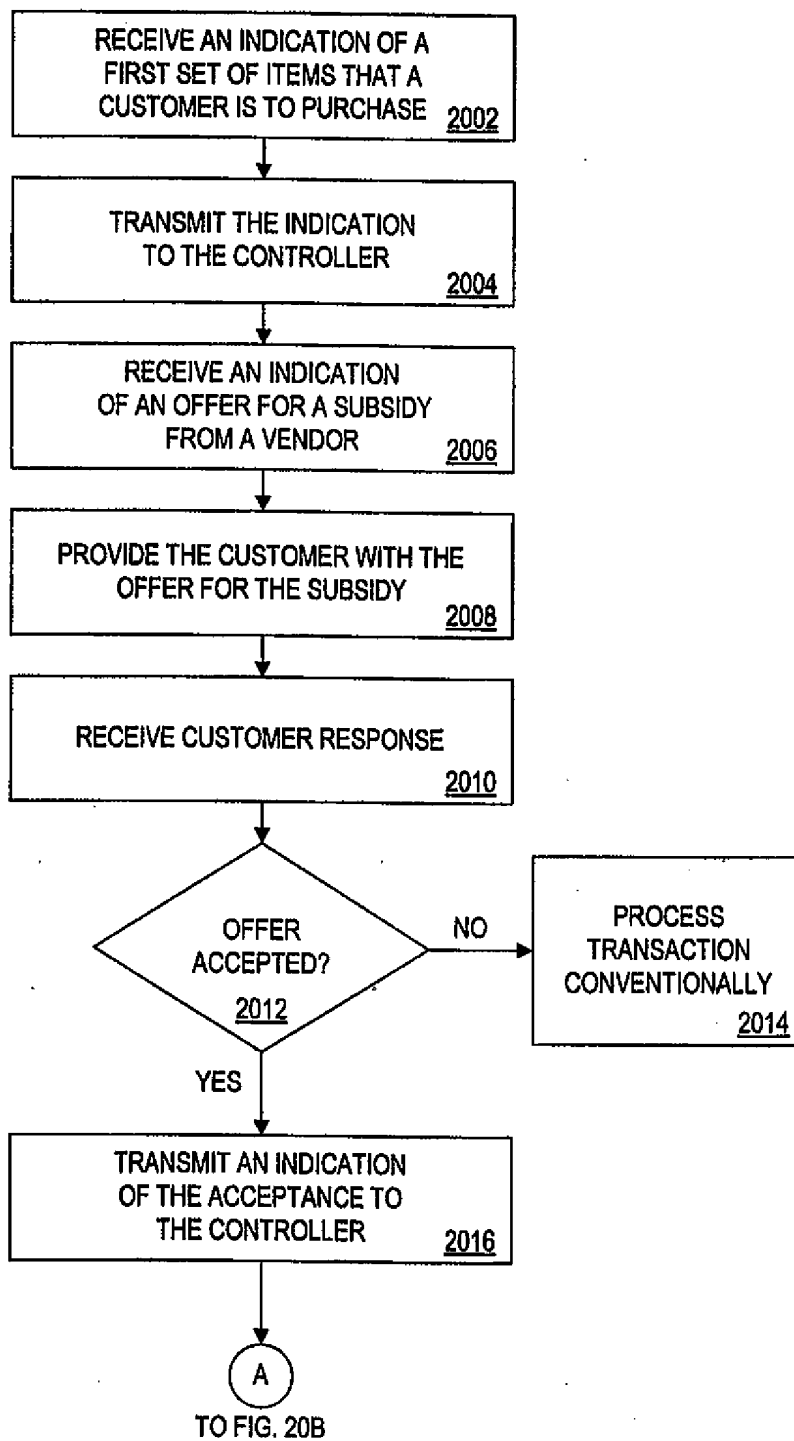


FIG. 20A

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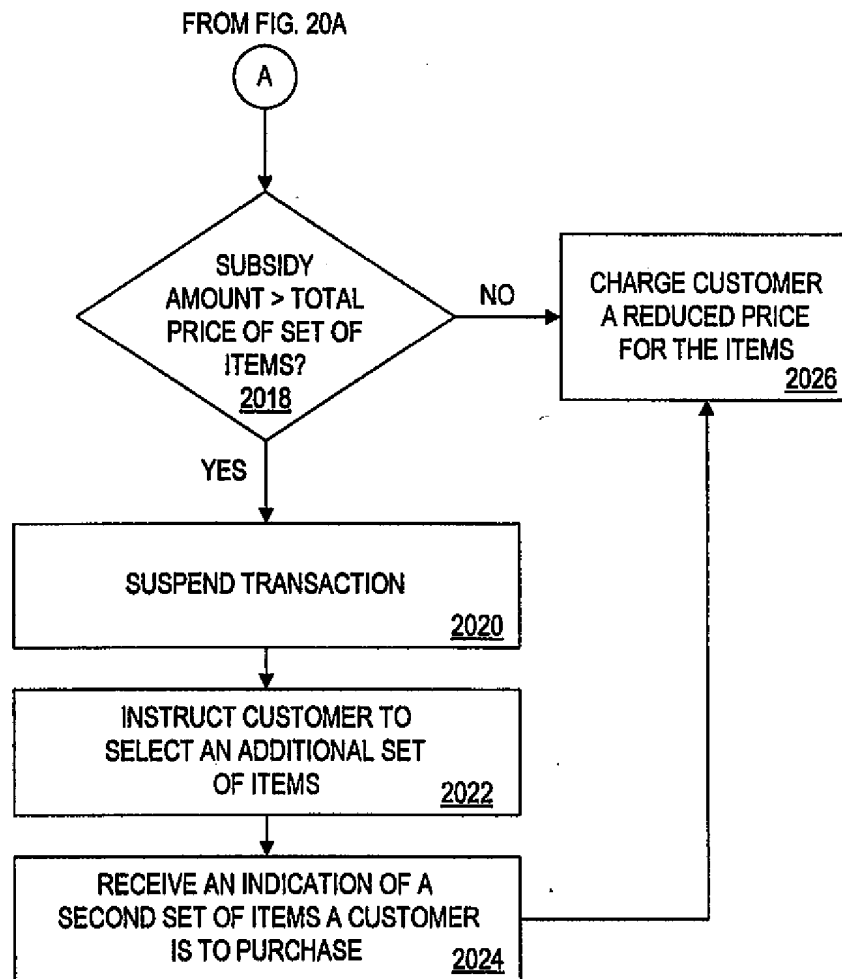


FIG. 20B

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2100

2102	CUSTOMER IDENTIFIER	C0002
2104	CREDIT CARD INFORMATION	AMEX 4444-5555-6666-3333
2106	NUMBER OF CREDITS REMAINING	3
2108	FREQUENCY	ONCE PER MONTH
2110	NEXT CREDIT DATE	3/18/2002
2112	AMOUNT OF CREDIT	\$10.00

FIG. 21

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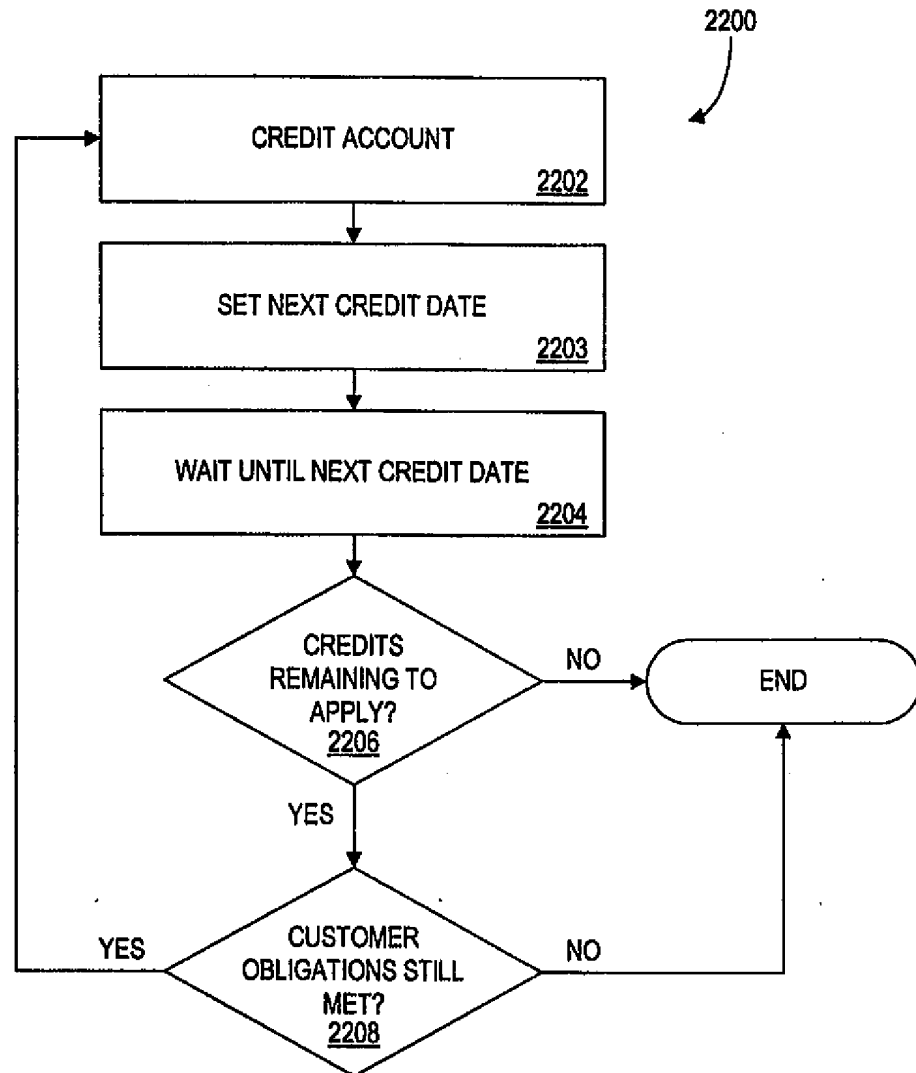


FIG. 22

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/13819

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :G06F 17/60, 17/00

US CL :705/26, 14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/26, 14, 1, 27, 16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	US 5,434,394 A (ROACH et al) 18 July 1995 Figure 3a, 3b, and 3c. col. 1 lines 50-67, col. 2 lines 48-65, col. 6 lines 1-5, col. 10	1, 13, 31, 61-69 ----- 2-12, 14 -30, 32-60
X ----- Y	US 5,570,417 A (BYERS) 29 October 1996, ab. col. 4 lines 27-62 col. 5	1, 13, 31 61-69 ----- 2-12, 14 -30, 32-60
Y	FICKENSCHER, LISA. American Express Seeks to Mine Its Data on Cardholder Spending Patterns. The American Banker. 24 March 1997. p 20.	2-12, 14 -30, 32-60



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
B earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*A* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

16 SEPTEMBER 1999

Date of mailing of the international search report

21 OCT 1999

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box 5000

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/13819

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	FICKENSCHER, LISA. Amex to Start Free Rewards Program with Discounts on Merchandise. The American Banker. 18 October 1996 p 10.	2-12, 14 -30, 32-60
Y	FITZGERALD, KATE. Amex Program Moves Loyalty to Next Level. Advertising Age. 04 November 1996. p 2	2-12, 14 -30, 32-60
Y,P	US 5,893,075 A (PLAINFIELD et al) 06 April 1999 col. 4 lines 51-65, col. 6 lines 36-58	1-67
Y,E	US 5,918,211 A (SLOANE) 29 June 1999 col. 5 lines 64-67, col. 6 lines 1-11, col. 8 lines 1-50	1-67

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/13819

B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

APS, DIALOG

search terms: promotion, rebate, discount, reward, incentive, credit card, online shopping, cashback, application, service provider